

LAKEPOINTE DEVELOPMENT
Kenmore, Washington

TRANSPORTATION IMPACT ANALYSIS
FINAL REPORT

June 27, 1997

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Prepared by

TRANSPORTATION PLANNING & ENGINEERING, INC.
2101 - 112th Ave. N.E., Suite 110
Bellevue, Washington 98004
Telephone - (206) 455-5320
FAX - (206) 453-7180





VICTOR H. BISHOP, P.E. President
DAVID H. ENGER, P.E. Vice President

TRANSPORTATION PLANNING & ENGINEERING, INC.

2101 - 112th AVENUE N.E., SUITE 110 — BELLEVUE, WASHINGTON 98004

TELEPHONE (206) 455-5320

FACSIMILE (206) 453-7180

June 27, 1997

Mr. Mike Gleason
PACIFIC RIM EQUITIES
11 Crescent Key
Bellevue, WA 98006

Re: Lakepointe Development
Transportation Impact Analysis

Dear Mike,

Please find attached the Final Transportation Impact Analysis for the Draft Supplemental Environmental Impact Statement (EIS) for the Lakepointe Development. This report is intended for use by the Environmental Impact Statement preparation team and the King County staff.

This report is written as a separate document that updates the project and identifies the changes and differences between the Proposed Action and the Northshore Community Plan Alternative as reported in the Lakepointe Transportation Analysis for Northshore Community Plan and Area Zoning Amendment, The Transpo Group, Inc., December 9, 1994 (The NSCP Lakepointe TA report). The reader will need a copy of the NSCP Lakepointe TA report to have a complete document. I recommend that it be included as an attachment to this report in the Draft SEIS.

A separate volume of Transyt 7F reports has been provided to King County as a technical appendix to this report.

Very truly yours,

TRANSPORTATION PLANNING
& ENGINEERING, INC.

Victor H. Bishop, P.E.
President

VHB:es

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I. INTRODUCTION

The purpose of the transportation element of the Supplemental Environmental Impact Statement (EIS) for the proposed Lakepointe Development is to determine how the project will impact its surrounding transportation system. This report is written as a supplement to the Lakepointe Transportation Analysis for Northshore Community Plan and Area Zoning Amendment, December 9, 1994, prepared by the Transpo Group. Information that has been presented in the above report will be referred to in this text as the "NSCP Lakepointe TA report" and will not be reiterated in full. The full text of the NSCP Lakepointe TA report is attached. Differences between the current proposal and the NSCP Lakepointe TA report proposal are discussed.

The NSCP Lakepointe TA report provided the transportation analysis for the Lakepointe Development as it was known in 1994. The report went beyond the King County Northshore Community Plan Transportation analysis and previous studies for Kenmore (Kenmore Traffic Circulation Study, Dec. 1994; Kenmore Central Business District Traffic and Access Study, March, 1993). The basic objective of the NSCP Lakepointe TA report was to identify the transportation impacts from full development (as it was seen at that time) from full development of the Lakepointe site. The report was directed by an Interagency Review Team (IRT) as described on page 7 of that report. The multi-agency approach was used to ensure that study issues were addressed in a comprehensive manner including the specific objectives of each agency.

In 1994, the Lakepointe Development was seen as including 1000 residential units, 318,000 sq. ft. of retail, 150,000 sq. ft. of office space, a six (6) screen cinema and a marina, as shown on Table 4., page 31 of the NSCP Lakepointe TA report. This is known as the "Northshore Community Design Plan Alternative" in the current Transportation Impact Analysis (TIA).

The results of the NSCP Lakepointe TA report are compared to the No Action and the Proposed Action alternatives in this TIA.

This TIA report is prepared and presented in the following sections:

- I. Introduction**
- II. Existing Transportation Conditions**
- III. Trip Generation and Distribution**
- IV. Non-Motorized and Transit Facilities**
- V. Transportation Operations Analysis**
- VI. Funding of Public and Private Transportation Improvements.**
- VII Mitigation**
- VIII. Unavoidable Adverse Impacts**

The **Existing Transportation Conditions** section describes the physical conditions as they appear in 1996 and traffic volumes as they were in 1993, the "existing conditions" year of the NSCP Lakepointe TA report. The 1993 traffic data is used here to be consistent with the prior reports and the transportation modeling results.

Under **Trip Generation and Distribution**, there are three scenarios per Table 1: *No Action Alternative* (2005 Without Project), *Proposed Action* (Plus an Alternative Development Scenario) and the *Northshore Community Plan Design Alternative*.

TABLE 1 COMPARISON OF ALTERNATIVES				
	NO ACTION	PROPOSED ACTION		NSCP ALTERNATIVE
		HOTEL	ALTERNATIVE DEVELOPMENT SCENARIO	
Residential Units	0	(700 Mid-rise, 100 condos) 1,200	(600 Mid-rise, 200 condo) 1,200	1,000
Retail Space	0	191,082 ft.	244,932 ft.	318,000 ft.
Office Space	0	191,830 ft.	279,588 ft.	150,000 ft.
Hotel	0	150 rooms	0	0
Movie Theater	0	8 screens	8 screens	6 screens
Health Club	0	36,270 ft.	36,270 ft.	0
Marina/boat slips	0	52 slips	52 slips	50 ±

The *No Action Alternative* describes the conditions as if the project were not constructed and describes how the 2005 background traffic volumes were derived.

The *Proposed Action* is a mixed use development consisting of residential, retail, office, hotel, cinema and health club in several buildings. The entire proposal has 1,200 residential units, approximately 191,000 square feet of retail space, approximately 192,000 square feet of office space, a 150 room hotel, an eight screen movie theater, 36,000 square feet of health club and a 52 slip marina. Figure 1 is the Master Plan working model of the proposed action.

The Alternative Development Scenario to the proposed action excludes the hotel use and has a slightly different mix of the uses listed above. It consists of 1200 residential units, approximately 280,000 square feet of office, approximately 245,000 square feet of retail, an eight screen theater, 36,000 square feet of health club and a 52 slip marina.

The *Northshore Community Plan (NSCP) Design Alternative* includes 1,000 residential units, 318,000 sq. ft. of retail, 150,000 sq. ft. of office space, a six (6) screen cinema and a marina of approximately 50 slips.

The **Non-Motorized and Transit Facilities** section describes how the pedestrian and transit facilities will operate for the three conditions listed above.

The **Transportation Operations Analysis** section describes how the roadway network will operate in terms of overall system delay, the expected levels of service and queue capacities at area intersections. The analysis covers the three periods of 1993 traffic conditions (existing conditions), 2005 without the project and 2005 with the project fully developed under the Proposed Action and the NSCP Alternative. The parking provisions and access restrictions on SR 522 are also discussed in this section.

The **Funding of Public and Private Transportation Improvements** section discusses this subject.

The **Mitigation** section examines the roadway system deficiencies with the proposed Lakepointe Development and discusses mitigations that are needed and proposed for the above listed scenarios.

The **Unavoidable Adverse Impacts** section lists the impacts to the street system that are unavoidable with or without the Lakepointe Development that cannot be mitigated.

II. EXISTING TRANSPORTATION CONDITIONS

The Lakepointe project is located in Transportation Service Area 1 as defined in the King County Comprehensive Plan. The significance of this designation is that the Transportation Adequacy Measures (TAMs) for that service area will allow the average of the intersections within the service area to be at LOS F with an averaged critical link zonal volume to capacity (v/c) ratio greater than 1.0 if adequate HOV and transit service is available, which is the case (See Section II C below). Therefore the Lakepointe proposal meets concurrency per Section 27 of King County Ordinance No. 11617. In the North Lake Washington area, it appears that no amount of increase in roadway capacity will be effective in mitigating regional commuter congestion and delays out of LOS F conditions at the two critical intersections on SR 522 at SR 104

and at 68th Ave. Northeast without major right of way acquisition and local business disruption.

A. Roadway System

The NSCP Lakepointe TA report describes the area in the project vicinity on pages 19 to 22. The descriptions remain unchanged, and are briefly (See Figure 1A):

SR 522, also known as Bothell Way, is the principal east-west arterial serving Kenmore. An eastbound transit only lane is under construction (1996-97) from 41st Ave. N.E. in Lake Forest Park to east of 73rd Ave. N.E. in Kenmore.

SR 104, also known as Ballinger Way, is a principal arterial serving Lake Forest Park and Mountlake Terrace to the west.

68th Ave. N.E. is a principal north-south arterial adjacent to the project site.

61st Ave. N.E. is a minor arterial to residential areas north of SR 522 northwest of the project site.

73rd Ave. N.E. is a north-south collector arterial east of the project site.

N.E. 175th St. is an east-west commercial access street that parallels SR 522 south of the Burke-Gilman Trail. It is designated as a principal arterial between 61st Ave. N.E. and 68th Ave. N.E. and as a collector arterial between 68th Ave. N.E. and 73rd Ave. Northeast. Access to the existing uses on the Lakepointe site is via N.E. 175th Street.

65th Ave. N.E. is a two lane local access street providing access to SR 522 from the south. From SR 522 to N.E. 181st St. it is classified as a collector arterial.

N.E. 181st St. is a two lane east-west collector arterial north of SR 522 between 65th Ave. N.E. and 73rd Ave. Northeast.

B. 1993 Traffic Volumes

Figures 2 and 3 show the 1993 AM and PM peak hour turning movement traffic volumes and the average daily traffic volumes (ADT's) on the streets surrounding the Lakepointe project site. This information is also presented in the NSCP Lakepointe TA report on pages 22 to 23. The 1993 data is used here to be consistent with the prior reports. This includes growth rates per Table 5, page 34 of the NSCP Lakepointe TA report and the resultant projected 2005 traffic volumes without Lakepointe.

Another report in addition to the NSCP Lakepointe TA report has presented existing daily traffic volumes in the Lakepointe area. The Kenmore Central Business District Traffic and Access Study, March, 1993, was prepared by David Evans and Associates, Inc., with the traffic portion prepared by the Transpo Group. The 1993 report's existing traffic volumes are predictably lower than the NSCP Lakepointe TA report prepared in 1994 with the exception of traffic on 68th Ave. N.E. south of N.E. 175th Street. The 1993 report has 26,600 vehicles per day and the NSCP Lakepointe TA report shows 25,000 vehicles per day. This small amount of difference (6%) is within the realm of daily and seasonal variations.

Actual counts on SR 522 east of 68th Ave. N.E. were obtained from the WSDOT Annual Traffic Report, 1994, and compared with the 1993 Kenmore CBD report and the NSCP Lakepointe TA report. The daily volume shown in the 1993 report is 36,000, the NSCP Lakepointe TA report is 37,200 and the Annual Traffic Report count, based on an actual count is 36,000 vehicles per day in 1994. The WSDOT 1995 Annual Traffic Report estimated this traffic volume to grow to 37,000 in 1995. An actual count for 1991 was also recorded in the 1994 Annual Traffic Report and is also 36,000 vehicles per day. What this means is that this section of SR 522 east of 68th Ave. N.E. did not experience significant actual growth from 1991 to 1994.

C. Transit Service

Transit service to the Lakepointe site is described in detail in the NSCP Lakepointe TA report beginning on page 24. Briefly, the Lakepointe site and surrounding area are well served by daily and expanded peak hour Metro Transit with connections to communities on both sides of Lake Washington. In addition peak hour express service is provided on 68th Ave. Northeast. In the fall of 1996, there were eight bus routes serving SR 522 at the site frontage, with 58 buses passing the site in the AM peak period and 56 buses in the PM peak period. A transit only lane is operating in each direction on SR 522 at the site frontage, with the eastbound direction completed in the Spring of 1997.

This level of transit service meets the requirements of King County to identify the Kenmore area as a Transportation Service Area 1 with adequate HOV and transit service per Section 27A of Ordinance No. 11617.

D. Non-motorized Facilities

Non-motorized facilities in the area surrounding the Lakepointe development are described in the NSCP Lakepointe TA report beginning on page 26 and are shown on Figure 1A. The Lakepointe site is served by the Burke-Gilman Trail. Bicyclists use the Burke-Gilman Trail for east-west travel with grade separation at 68th Ave. Northeast. Sixty-eighth Ave. N.E. has a paved shoulder on the west side from N.E. 175th St. to N.E. 170th St. for bicycle use, except on the Sammamish River Bridge where it is a sidewalk. The east side of 68th Ave. N.E. has a shoulder from N.E. 170th St. to the bridge, and a sidewalk across the bridge and north to N.E. 175th

Street. Existing sidewalks are described on Page 27 of the NSCP Lakepointe TA Report and are shown on Figure 1A..

E. Planned Transportation Improvements

There are several planned transportation improvements in the Lakepointe project vicinity. The 1997 Transportation Needs Report (TNR) is a comprehensive list of recommended improvements to serve County wide transportation needs through the year 2012. Only those projects listed in the 1997 CIP are funded. All relevant projects listed in the 1997 CIP are included, even though some have been completed. The 1993 Non-Motorized Transportation Plan (NMTP) constitutes official County policy with regard to non-motorized transportation issues. The policies and projects of the NMTP are integrated into the County's Transportation Needs Report and CIP priority process, allowing non-motorized projects to be evaluated and prioritized as an equal component of the County's overall transportation development program. The following are the planned transportation improvements and/or locations:

CIP #100193 and 1997 TNR N-7.30

68th Ave. N.E. from N.E. 181st St. to N.E. 185th Street. Widen to three lanes plus bicycle lanes. (Design under way, scheduled for construction in 2001.)

CIP #100395 and 1997 TNR N-9.10

Lakepointe Drive from 64th Ave. N.E./SR 522 to 68th N.E. Construct new intersections on SR 522 and on 68th Ave. N.E. for Lakepointe Way N.E. (Developer agreement is currently under negotiation.)

CIP #100399 and 1997 TNR N-66

68th Ave. N.E./SR 522 from SR 522 to N.E. 181st St. Add northbound lane on 68th Ave. N.E. matching roadway section to the south, signal upgrade. (Design programmed to begin in 1999)

CIP #100894 and 101595

Seismic Retrofit of 68th Ave. N.E. bridges over Sammamish River. (Construction completed in 1995.)

CIP #102591

Kenmore CBD Recirculation Study (Study completed, The Kenmore CBD traffic and Access Study, March 5, 1993.)

1997 TNR N-6.10 (Not CIP FUNDED)

N.E. 181st St. from 65th Ave. N.E. to 73rd Ave. N.E. (unfunded, medium priority)

1997 TNR N-6.20 (Not CIP Funded)

N.E. 181st St. from 62nd Ave. N.E. to 65th Ave. N.E. (unfunded, low priority, private)

1997 TNR N-7.40 (Not CIP Funded)

68th Ave. N.E. @ N.E. 181st St. Realign Intersection (unfunded, high priority)

1997 TNR N-9.20 (Not CIP Funded)

N.E. 175th St. from 68th Ave. N.E. to 73rd Ave. N.E. Add TWLTL, realign intersection (unfunded, medium priority)

1997 TNR N-10 (Not CIP Funded)

65th Ave. N.E. from SR 522 to N.E. 175th Street. Realign roadway and install signal. This project will be eliminated by the Proposed Action (unfunded, low priority, private)

1997 TNR N-40 (Not CIP Funded)

80th Ave. N.E. from SR 522 to County line. Pave shoulders, provide equestrian facility. (unfunded, medium priority)

1997 TNR N-51 (Not CIP Funded)

SR 522 from 61st Ave. N.E. to 80th Ave. N.E. Curb, gutter and sidewalk (part of project has been constructed by WSDOT as part of 41st Ave. N.E. to Kenmore P & R Lot Eastbound Transit Lane project)

1997 TNR N-52.20 (Not CIP Funded)

Juanita Drive from N.E. 153rd St. to N.E. 170th Street. Widen to three lanes, bicycle lanes, sidewalks (unfunded, high priority, King County)

1997 TNR N-64 (Not CIP Funded)

SR 522 at 80th Ave. N.E. Upgrade traffic signal. (unfunded, high priority, WSDOT)

1997 TNR N-66 (Not CIP Funded)

73rd Ave. N.E. from SR 522 to N.E. 175th Street Reconstruct roadway, upgrade signal (unfunded, high priority, WSDOT/King County)

1997 TNR N-73 (Not CIP Funded)

61st Ave. N.E. from SR 522 to Snohomish County line. Reconstruct roadway, add bicycle lane (unfunded, medium priority)

1997 TNR N-74.30 (Not CIP funded)

Simonds Road from Juanita Dr./68th Ave. N.E. to 100th Ave. N.E. Pedestrian, bicycle access, safety improvement study, (unfunded, medium priority)

1997 TNR N-108 (Not CIP Funded)

SR 522 Pedestrian Overcrossing west of 68th Ave. N.E. (unfunded, high priority, WSDOT, private, King County)

1997 TNR N-124.20 (Not CIP Funded)

Replace 68th Ave. N.E. bridges over Sammamish River (unfunded, low priority)

1997 TNR N-138 (Not CIP Funded)

N.E. 182nd St. from 68th Ave. N.E. to 73rd Ave. N.E. Reconstruct roadway (unfunded, high priority, King County)

1997 TNR N-139 (Not CIP Funded)

N.E. 181st St. from 73rd Ave. N.E. to Kenmore P & R. Construct walkway/pathway (Unfunded, high priority, King County)

SR 522 (Lake City/Bothell Way) Multi-Modal Project, I-5 to I-405. Enhance roadway safety and optimize the people-carrying capacity (Project planning and scoping under way by WSDOT through Dec., 1997; Design 1998; Construction 1999 - 2001; WSDOT)

III. TRIP GENERATION AND DISTRIBUTION

A. No Action Alternative (2005 Without Project)

The no action alternative describes the 2005 roadway conditions as if the Lakepointe Development was not constructed. This is the 2005 without the project condition and the travel forecasts are shown in Figures 4 and 5.

The existing and historical land uses are described in detail in a November 26, 1996, memo from AGRA Earth & Environmental to Michael Gleason. There are seventeen (17) tenant locations on the site. They are primarily industrial and commercial in nature, with several related to the sand, gravel, concrete and asphalt industry. There are an estimated 203 existing employees on site. Existing traffic data was determined for the NSCP Lakepointe TA Report and is recorded on Table 3B (See Footnote 7 of Table 3B).

The Lakepointe Development is expected to be completed by 2005 and therefore 2005 serves as the horizon year for future calculations. Background AM and PM peak hour traffic volumes for 2005 were developed based on King County's traffic forecasting model for the Northshore Community Plan (NSCP) as detailed in the NSCP Lakepointe TA report starting on page 32. The NSCP developed traffic volumes for the year 2010 starting from a 1988 base model year. These two data points were then used to determine yearly growth rates for the area around the Lakepointe site with and without the project to interpolate 2005 traffic volumes as

shown on Table 5, page 34, NSCP Lakepointe TA report. Therefore the background traffic volumes in the 2005 forecasts are not as great as the 2010 forecasts in the NSCP or the 2020 forecasts in the King County Comprehensive Plan (KCCP). Figures 4 and 5 show the projected 2005 AM and PM peak hour background traffic volumes with no new development on the Lakepointe site. This is the same data as contained in the NSCP Lakepointe TA report in a new format.

B. Proposed Action

1. Description

The Proposed Action for the Lakepointe site includes the construction of a new four lane (with added turn lanes) Principal Arterial (Lakepointe Way N.E.; aka Lakepointe Drive in the NSCP Lakepointe TA report;) connecting 68th Ave.N.E. to SR 522 just as in the NSCP Lakepointe TA report. The NSCP Lakepointe TA report, however, had N.E. 175th St. connecting directly into the new roadway while still connecting to 68th Ave. N.E. as shown in Figure 1 of the NSCP Lakepointe TA report. The Proposed Action keeps N.E. 175th St. on its current alignment but adds two more site access points to Lakepointe Way Northeast.

Figure 1 shows the project master plan and Figure 12 shows the proposed roadway lanes in a schematic diagram. There are eight access points to the project from the through public roadway system. One of these is N.E. Lakepointe Blvd., the major center spine roadway, which is also proposed to be a public roadway. Northeast Lakepointe Blvd. will have nine parking lot/parking garage driveways. The eight access points are as follows: (see Figure 12)

From Lakepointe Way Northeast:

- a. N.E. Lakepointe Blvd. (south) - major project spine road to the south, serving all upper parking lots with driveways and/or ramps to all parking garages southeast of Lakepointe Way N.E., with a traffic signal at Lakepointe Way Northeast.
- b. N.E. Lakepointe Blvd. (north) - upper access to office building north of Lakepointe Way N.E. with garage ramp connection to the south side of Lakepointe Way N.E. via a ramp under Lakepointe Way N.E., using the same traffic signal as a. above.

- c. Driveway to the retail/residential area in the Southeast portion of the site. A right-in/right-out/left-in stop sign controlled driveway on Lakepointe Way N.E. to the upper deck parking area that is connected to the garage area by an internal ramp.
- d. Driveway to the office building/cinema area west of the Lakepointe Way N.E./N.E. Lakepointe Blvd. intersection. A right-in/right-out/left-in stop sign controlled driveway on Lakepointe Way N.E. to a ramp down to the parking garage. Entering vehicles will not have access to the upper deck at this driveway.

From 68th Ave. Northeast

- e. A right-in/right-out driveway from 68th Ave. N.E. to the retail/residential area in the southeast portion of the site. This driveway will connect to the upper deck parking for retail and into the parking garage for residential via a direct ramp and via N.E. 173rd Place.

From N.E. 175th Street

- f. A stop sign controlled driveway under Lakepointe Way N.E. that leads to the service areas and the parking garage via a local access road under both Lakepointe Way N.E. and N.E. Lakepointe Boulevard.
- g. A driveway to the office buildings in the Northeast portion of the site.
- h. A driveway to the office buildings in the Northeast portion of the site and connected to the parking garage south of Lakepointe Way N.E. via a ramp under Lakepointe Way N.E.

2. Trip Generation and Distribution

The results for the Proposed Action of the trip rate categories, sizes and reductions in the following discussion yield a decrease from the NSCP Lakepointe TA report in the daily trips from 14,212 to 13,692 trips, a slight increase in the AM peak hour trips from 603 to 641 trips and roughly the same PM peak hour trips from 1,471 to 1,463 trips. See Table 2.

TABLE 2				
TRIP GENERATION COMPARISON				
	NO ACTION	PROPOSED ACTION		NSCP ALTERNATIVE
		HOTEL	ALTERNATIVE DEVELOPMENT SCENARIO	
Daily Trips	1,116	13,692	14,450	14,212
AM Peak	93	641	684	603
PM Peak	93	1,463	1,548	1,471

There are several changes in the trip generation estimate for the proposed action from that presented in the NSCP Lakepointe TA report in its Appendix C, Tables 1-3. Table 3A shows the trip generation rates and Table 3B shows the trip generation estimates for the Lakepointe Development. There is a combination of factors that have created the change in this number of trips generated. They include:

- A refinement of the land uses proposed to allow more defined ITE Land Use Categories, and therefore changes were made in the trip generation rates,
- The size of the proposed land uses, and
- The inclusion of the "capture rate" of trips between the office and retail uses.

a.) Trip Generation Rates

All trip generation rates are obtained from the Institute of Transportation Engineers (ITE) Trip Generation, Fifth Edition, 1991. Residential uses have been broken down into more categories than presented in the NSCP Lakepointe TA report. General apartments (ITE Land Use 220) has been changed to mid rise apartments, (ITE Land Use 223), to more closely reflect the type of apartments on the Lakepointe site. Senior housing has been divided to include extended care senior housing (ITE Land Use 253), in addition to the retirement community (ITE Land Use 250) as presented in the NSCP Lakepointe TA report.

Medical office building (ITE Land Use 720) has been included in addition to general office building (ITE Land Use 710) shown in the NSCP

Lakepointe TA report. Additionally new categories for a hotel (ITE Land Use 310) and health club (ITE Land Use 493) have been included.

b.) Size of Proposed Land Uses

In addition to new trip generation categories, the number or size of uses has been changed in the proposal. The specific changes are as follows (See Table 1):

There are 200 more dwelling units in the proposal than presented in the NSCP Lakepointe TA report.

There are approximately 42,000 more square feet of combined office and medical office area than the general office shown in the NSCP Lakepointe TA report.

There are approximately 127,000 less square feet of retail area.

The movie theater has been increased from six screens to eight screens.

A 150 room hotel, assumed with an 80 percent occupancy, has been added.

A 36,270 square foot health club has been added.

c.) Trip Reductions

Reductions in the trips generated are basically the same with one additional reduction. A fifteen percent reduction in shopping trips was made in both the shopping trips and the office trips to account for the captured trips associated with these uses that was not accounted for in the NSCP Lakepointe TA report.

The ITE Trip Generation Fifth Edition is the latest version of the collection of field data for a wide variety of land uses from locations around the United States. In Chapter I., Introduction, the report discusses the necessity of applying appropriate reductions to trips generated by an individual land uses to obtain reasonable net trips produced by the project. Several reductions were foot noted on Table 3, Appendix C of the NSCP Lakepointe TA report. These reductions include a "Capture" rate between on-site residential workers and on-site office workers (assuming a few people who live on-site also work on-site) and between on-site residents and on-site shoppers (assuming a few

people who live on-site also shop on-site). However, the NSCP Lakepointe TA report did not account for any shopping trips from people who work in the office buildings on-site but do not live on-site. Trip Generation specifically identifies this possibility as a combination of uses on a mixed use site that will have some level of "captured" or "internal" trips. These are vehicle trips that are not made because people walk between land uses. This is separate from the TDM reduction, which is the portion of vehicle trips that are not made because people use transit or other non-single occupant vehicle ways of getting to the site (destination) from their beginning point (origin).

The Capture rate for shopping trips by office workers was estimated at 15% of the shopping trips in the peak hours and 9% of the daily shopping trips. This is consistent with and on the low end of data reported in Chapter I of the Trip Generation report.

d.) Prior Land Use Assumptions for Transportation Planning

The King County Transportation Planning model for the Northshore Community plan assumed a mix of 600 dwelling units and commercial development to accommodate 1,500 employees in the Traffic Analysis Zone containing the Lakepointe site and estimated 1,500 vehicle trips during the PM peak hour. The trip generation for the actual proposed use on the Lakepointe site is within this projection.

e.) Trip Distribution

The trip distribution used for the Lakepointe site project traffic is the same as that detailed in the NSCP Lakepointe TA report on page 31/32.

Since the trip generation land uses and values are very close to the same as presented in the NSCP Lakepointe TA report, the regional draw to the site is similar. Residential trips are comprised of 50 percent to and from the west on SR 522, 15 percent to the south on 68th Ave. N.E., 25 percent to the east on SR 522 and 10 percent north of SR 522. Commercial/office trips are comprised of 30 percent to the west, 30 percent to the south, 25 percent to the east and 15 percent north of SR 522. Retail trips are distributed with 15 percent to the west, 35 percent to the south, 20 percent to the east and 30 percent north of SR 522.

Figures 6, 6A, 7 and 7A show the AM and PM peak hour project traffic. The distribution was accomplished by means of a spreadsheet that TP&E created that broke the Lakepointe site into five distinct areas. Each area is further broken down into the three land uses on the site

that can be associated with it: residential, office and retail. Using the above general distributions for each type of land use, the site generated volumes were assigned to the eight project access points and the surrounding street system traffic movements. This procedure was repeated for AM and PM peak hour conditions. Figures 6 and 7 show the aggregate trip distribution percentages for the street system using the above methodology at a cordon line around the site. This cordon line is shown on Figures 6 and 7 as the insert labeled, "See Lakepointe detail above."

The site generated trips at the intersections shown on Figure 6 and 7 outside of this cordon line were determined differently. For these four intersections (SR 522 at SR 104, 73rd Ave. N.E. and 81st Ave. N.E. and 68th Ave. N.E. at N.E. 170th St.) site traffic was determined by subtracting the King County Transportation Model data for the "without project" scenario from the King County Transportation Model data for the "with project" scenario per pages 32-40 of the NSCP Lakepointe TA report.

The two methods of determining site generated trips at a given intersection are both standard practice in the transportation planning industry, with each having its own advantages and disadvantages. The two methods can be described as follows:

i. ITE Rates/Manual Distribution

This is the traditional project level model where land uses are relatively well defined and categorized into ITE Land Uses with trip generation data published by ITE used to estimate the number of vehicle trips generated by each land use. Adjustments are made to obtain reasonable net trips to the site to account for captured trips on site, pass-by trips and transit/mode shift changes. The trips are then distributed to the road system via a manual rational process of determining where population and employment centers are in relation to the site. In the case of Lakepointe, the NSCP Transportation Planning Model was used as the primary data source to estimate the trip distribution.

This methodology was used for the intersections within the identified cordon line.

ii. Transportation Modeling via regional data base.

The traditional transportation planning modeling has a different approach. In this case, the region is divided into small analysis zones and land use planners estimate how many households of various types are in each zone. They also estimate how many employees of various types are in each zone. Extensive origin and destination data is collected on a region wide basis to create the interrelationship between residential and employment locations. The road system is modeled with capacity, speed and other pertinent information included. The model then uses the derived formulas to estimate the number of trips made and distributes them between zones on a minimum path network assignment. The results are then compared to actual ground traffic counts. Adjustments are made to the formulas to "Calibrate" the model to replicate the actual condition for a known time. This was done by King County for the NSCP in 1988.

The next step is to estimate the future population and employment forecasts by analysis zone, and, using the calibrated model, estimate future trips and assign them to the future roadway network. This was done for the NSCP, for 2010. A model run was made with the Lakepointe site remaining undeveloped and a separate one with the proposed site development. The difference between these adjusted model runs was used for the intersection outside of the cordon line.

The first method tends to make high estimates for trips at intersections, particularly those further away from the site. It estimates high because it does not account for a major factor of reality when a new land use is introduced. That is the trips that are redirected around the area roadways because of the new land use. The transportation modeling method does a much better job of accounting for this, and results in substantially lower volume projections. The higher estimates are appropriate for the closer intersections because it is conservatively high and the trip redirection is not as significant close to the site. The lower estimates for the intersections outside the cordon line are appropriate because they match reality better and are consistent with the regional modeling forecasts.

The Interagency Review Team (IRT) determined that the methodologies used were appropriate for the intersections they were applied to for the NSCP Lakepointe TA. This TIA used the same methodology.

The trip generation results from the NSCP Lakepointe TA report for the intersections outside the cordon line were adjusted proportionately by the ratio of trips generated for the AM and PM peak periods between the Proposed Action and the NSCP Lakepointe TA and are shown on the insert of Figures 6 and 7.

Figures 8 and 9 show the AM and PM peak hour 2005 background plus project traffic volumes. These volumes were obtained by adding the Figures 6 and 7 volumes to the traffic volumes in Figures 4 and 5 after they were redistributed to the new roadway network and after the existing trips to the existing uses on the site were deducted.

C. Alternate Development Scenario

1. Description

The roadway configuration for the Alternate Development Scenario (ADS) remains the same as for the Proposed Action. The difference in the ADS is the quantities of the various land uses and is described in the section below.

2. Trip Generation and Distribution

There are some changes in the trip generation estimate for the ADS when compared to the Proposed Action. The major differences are as follows (See Table 1):

There are still 1200 residential dwelling units, however there are 600 mid rise apartments and 200 condominiums in the ADS as compared with 700 mid rise and 100 condominiums in the Proposed Action.

There are 53,850 more square feet of retail space in the ADS. The ADS contains 244,932 square feet and the Proposed Action contains 191,082 square feet.

There is an increase of 87,758 square feet of office space from 191,830 square feet in the Proposed Action to 279,588 square feet in the ADS.

The ADS has no hotel. The Proposed Action has a 150 room hotel.

The ADS land uses were input into the trip generation spreadsheet as outlined above for the Proposed Action. Table 4A shows the trip generation rates and Table 4B shows the trips generated. The ADS generates 43 more trips in the AM peak hour, 85 more trips in the PM peak hour and 758 more trips during an average weekday when compared to the Proposed Action (See Table 2).

Figures 10 and 11 show the ADS project trips on the roadway network. The trips were assigned to the network using the TP&E spreadsheet as detailed above under the Proposed Action. The new trips at the external intersections were adjusted in the same manner as the Proposed Action.

D. The Northshore Community Plan Design Alternative

The Northshore Community Plan Design Alternative is the basis of the NSCP Lakepointe TA report. Table 4, P. 31, and Appendix C of that report shows the trip generation rates and net trip generation. The net trips generated for this alternative are 14,212 daily trips, 603 in the AM peak hour and 1,471 in the PM peak hour (See Table 2). Figures 8-10 and Appendix E of the NSCP Lakepointe TA report show the traffic volume estimates for this alternative.

IV. NON-MOTORIZED AND TRANSIT FACILITIES

A. No Action Alternative (2005 Without Project)

1. Pedestrian and Bicycle Traffic

The pedestrian and bicycle facilities without the Lakepointe project would be the same as those described in the existing conditions section of this report.

2. Transit

The transit facilities without the Lakepointe project would be the same as those described under the existing conditions section of this report.

B. Proposed Action

1. Pedestrian and Bicycle Traffic

The Proposed Action pedestrian and bicycle access plan is shown graphically on Sheets A2.3a - A2-3c, of the Revised Commercial Site Development Permit (CSDP), Dec. 23, 1996. All new facilities would conform to national, state, King County and Metro standards for

accessibility for handicapped persons. All new crosswalks would be well illuminated, signed and designed for maximum pedestrian safety.

a.) On site facilities

The periphery of the site would be dedicated to pedestrian and bicycle use. Northeast Lakepointe Boulevard would be urban in character, and the shoreline, harbor and waterfront would be connected by view and access corridors that traverse the site. Barrier-free pedestrian and bicycle links between the site's public spaces, the Burke-Gilman trail and the Metro transit stops would be clearly marked. Public access to views of Lake Washington, the harbor, and the Sammamish River, as well as other parts of the development, would be provided at many points around the site.

The trail along the Sammamish River is planned with native growth and opportunities for natural habitat viewing and interpretive depictions for learning experiences.

The Shoreline Trail, each of the soft surface trails to the river's edge, the Canal Esplanade, and all pedestrian walkways and connections would be accessible and open to the general public.

b.) Off Site Connections

The Burke Gilman Trail will be reconstructed below its existing grade to allow for clearance under Lakepointe Drive. This will be done in conjunction with the N.E. 175th Street undercrossing of Lakepointe Way Northeast.

Lakepointe's pedestrian and bicycle routes are connected to the Burke-Gilman Trail which allows access to the proposed future transit hub and pedestrian bridge crossing SR 522. New signalized crosswalks would be provided across SR 522 on the east side of Lakepointe Way N.E., across Lakepointe Way NE on the South side of SR 522, across Lakepointe Way N.E. on the east side of N. E. Lakepointe Blvd. and across 68th Ave. N.E. on the north side of Lakepointe Way N.E. Traffic signal timing would be provided at these crosswalks to allow safe crossings by pedestrians. Sidewalks would be provided on the street frontages.

An alternative design would be to prohibit pedestrians on the southwest corner of SR 522 at Lakepointe Way N.E. This would be accomplished by not reconstructing the sidewalk along the southwest edge of the right turn lane (the newly constructed sidewalk along SR 522 west of 65th

Ave. N.E. will have to be removed to construct the right turn lane), not providing a sidewalk on the west side of Lakepointe Way N.E. from SR 522 to N.E. 175th St. and not providing the crosswalk across Lakepointe Way N.E. on the south side of SR 522. The pedestrian linkage would be provided via the Burke Gilman Trail as follows:

- A pedestrian connection from SR 522 west of the proposed separate eastbound right turn lane on SR 522 (for traffic turning right into Lakepointe Way N.E.) to the Burke Gilman Trail,
- A connection between the trail and the site at the lower level via a crosswalk across N.E. 175th St. at Lakepointe Way N.E. to the Grand Stairs/Boardwalk area,
- An elevator/stair connection from the Burke Gilman Trail to the upper level Lakepointe Way N.E. east sidewalk which then connects to the SR 522 sidewalk and transit stop east of Lakepointe Way N.E., and
- A barrier-free access ramp at the Grand Stair from the Boardwalk to the west (south) sidewalk of Lakepointe Way Northeast.

This would remove the pedestrians from the high traffic volume high speed free flowing right turn traffic movement from eastbound SR 522 to Lakepointe Way N.E. and provide connections to the grade separated Burke Gilman Trail. The number of pedestrians using either the sidewalk or the alternative route, (whichever is provided) is expected to be quite low because the first business to the west is 800 feet west of the new Lakepointe Way N.E. intersection, the transit only lane construction project did not construct a sidewalk for the next 1000 feet to the west where there are limited pedestrian facilities and the Burke Gilman Trail provides an inviting alternative walking route.

The crossing of N.E. 175th St. would be at the intersection of the service and parking access road under the elevated Lakepointe Way Northeast. The estimated daily traffic volume on N.E. 175th St. is 3,500 vehicles per day (345 vehicles in the PM peak hour). Pedestrians and bicyclists would be provided a path next to the Grand Stair leading to the Harbor Viewpoint, the Boardwalk and the rest of the on site system.

A second crossing of N.E. 175th St. would be at the eastside of access point h. (See Figure 12 and Sheet A2.3a, CSDP). At this crossing of

N.E. 175th St. the traffic volume would be approximately 5,000 vpd (483 vph). Both of these access point intersections on N.E. 175th St. are projected to operate at LOS A with stop sign control of the access points. Pedestrians and bicyclists are projected to have adequate gaps available in the N.E. 175th St. traffic to make safe and easy crossings. This connection to the Burke Gilman Trail would lead to:

- The phase 6 buildings (Buildings G-1 and G-2),
- A grade separated crossing of Lakepointe Way N.E. through the lower retail/residential area parking garage to the Shoreline Trail, and
- To the north sidewalk of Lakepointe Way N.E., where connection can be made to the existing facilities on 68th Ave. N.E. via the new traffic signal and crosswalk.

2. Transit

The requirement that the residential component occur throughout the various phases of the development of the Proposed Action would ensure that transit and transportation linkages occur from the very beginning of the project. Pedestrian access from the core of the project to the transit stops is an integral part of the design of the project.

A transit stop is proposed on the south side of SR 522 between Lakepointe Way N.E. and 68th Ave. N.E., and an overpass over SR 522 would eventually be provided through coordinated efforts with the County to facilitate north-south pedestrian crossings of SR 522. A new pedestrian crosswalk would be provided across SR 522 at the new traffic signal to be installed on SR 522 at Lakepointe Way Northeast connecting to the transit stop on the north side of SR 522. The new transit stop on the south side of SR 522 would be connected to the lower level of the project via a stair and elevator (See Barrier Free Access Plan, Sheet A2.3b of the Commercial Site Development Permit, Dec. 23, 1996.)

The sidewalks and crosswalks associated with Lakepointe Way N.E. and the transit stop on SR 522 with its pedestrian connection to the project would be provided during the first phase of construction. The future pedestrian overcrossing of SR 522 would supplement the new crosswalk across SR 522 when installed per King County's Transportation Needs Report project N-108 as described in Section II.E.

The November 1996, voter approval of the Regional Transit Authority (RTA) puts significant emphasis on enhancing the transit system by implementing Regional Express Bus service with enhanced community connections at critical locations. The Implementation Guide for Sound Move: The Ten Year Regional Transit System Plan was approved by the RTA Board in May, 1997. The Implementation Guide calls for an Express Bus Route along SR 522 connecting Woodinville to Northgate by 2000 with community connections at these locations plus Bothell, Lake Forest Park and Lake City. This Express Bus Route will connect with two other Express Bus routes each on I-5 and I-405, providing Kenmore with Express Bus connections to Seattle, Bellevue, Everett and the entire region via RTA and local service.

C. Alternative Development Scenario

1. Pedestrian and Bicycle Traffic

The pedestrian and bicycle amenities are the same as for the Proposed Action described above.

2. Transit

The transit facilities are the same as for the Proposed Action described above.

D. Northshore Community Plan Design Alternative

The pedestrian, bicycle and transit facilities for the Northshore Community Plan Design Alternative are described on pp. 65-71 in the NSCP Lakepointe TA report.

V. TRANSPORTATION OPERATIONS ANALYSIS

A. System Description

Figure 12 shows the lane configuration for the intersections analyzed in 1993, 2005 without and 2005 with the project. The 2005 with Lakepointe project network was modified from the NSCP Lakepointe TA report to reflect the proposed action. See Figure 12. Table 6 of the NSCP Lakepointe TA report shows the roadway system assumptions. The "2005 without Project" roadway system assumptions were changed so that the 80th Ave. N.E./SR 522 southbound traffic is in a single lane. Changes in the "2005 with Lakepointe" scenarios are as follows:

1. N.E. 175th St. is not realigned to connect with Lakepointe Way (Drive) northeast.

2. Northbound 68th Ave. N.E. is widened at Lakepointe Way N.E. to provide two exclusive left turn lanes and one thru lane instead of left, left-thru and thru lanes.
3. A double left turn lane from Lakepointe Way N.E. to N.E. Lakepointe Blvd. is provided.
4. Southbound traffic on 80th Ave. N.E. at SR 522 is in a single lane.
5. The distance between N.E. 175th St. and Lakepointe Way N.E. on 68th Ave. N.E. is 320 feet.

B. Transyt 7F

1. Proposed Action and No Action Alternative

The TRANSYT 7F software package was utilized to comprehensively evaluate traffic operations of the major intersections in the study area. The TRANSYT 7F model is a tool that can assist in evaluating how traffic may operate in the future--it cannot exactly predict delays, travel speeds, or traffic queues. The future conditions analyzed in this study (both with and without Lakepointe) include locations where the forecasted traffic volumes exceed the available capacity for certain traffic movements. Under these conditions the TRANSYT 7F model can produce unreliable results, especially in the estimated delay values. Furthermore, the over capacity conditions can create traffic queues that may back up into upstream intersections, which results in operating conditions at some locations being worse than those estimated by the model. For these reasons the analysis focuses on potential differences between analysis scenarios and not the numerical values produced by the model.

For purposes of this planing analysis, the key use of the model is to provide relative comparisons between future conditions with and without the Lakepointe development and associated roadway improvements. The model output also assists in the evaluation of potential changes in traffic operations in the corridor between existing (1993) and future (2005) conditions (with or without Lakepointe).

It is recognized in this analysis that the intersection of SR 522 at 68th Ave. N.E. currently operates at over saturated conditions and is expected to continue to do so under all alternatives.

Transyt 7F model runs were performed for 2005 with project conditions for the Proposed Action and compared to existing and 2005 without project (No Action) conditions. The existing and 2005 without project conditions were obtained

from the NSCP Lakepointe TA report and are the same as described in pages 41 to 45 with one exception. The southbound approach to the SR 522/80th Ave. N.E. intersection was revised to assume a one lane approach per WSDOT's request rather than a two lane approach as assumed by the NSCP Lakepointe TA report.

The Transyt 7F model analyses a coordinated traffic signal system on an arterial or a network of arterials. Coordinated traffic signal systems require a common "cycle length" for all traffic signals in the system. The cycle length is the total time for a signal to complete one cycle. The Transyt 7F model has the capability of either using a predetermined cycle length, or it can determine the optimum cycle length for the systems. The NSCP Lakepointe TA used the existing cycle lengths for existing conditions and the optimized 180 sec. cycle length for the 2005 conditions with and without the NSCP alternative. The predetermined existing cycle lengths were used in this analysis to be compatible with the existing conditions. The Existing Conditions, No Action and Proposed Action results of Tables 6A and 6B are based on the 140 sec. (AM) and 150 sec. (PM) cycle lengths of the existing conditions.

Therefore, the Transyt 7F analysis results for 1993 conditions, No Action (2005 without the project) and the Proposed Action (2005 with the project) in Tables 5A, 5B, 6A and 6B are directly comparable. In the same way, the results in the NSCP Lakepointe TA report are directly comparable between the 2005 without project and the 2005 with the NSCP Alternative per Tables 8, 9 and 10 of that report. However, the system performance, LOS and queue lengths results of the Proposed Action and the NSCP alternative shown in Tables 5A, 5B, 6A, 6B and 7 are not directly comparable, primarily due to the cycle length difference and also due to the system difference described in Section V.A.

The performance analysis, Level of Service analysis and Traffic Queues results reported here reflect these differences.

a.) Performance Analysis

A system-wide analysis was performed for the 2005 with project conditions as described in pages 48 & 49 of the NSCP Lakepointe TA report and compared to existing and 2005 without project conditions. Table 5A shows the AM peak hour comparison and Table 5B shows the PM peak hour comparison. In addition, three major corridors were evaluated.

The three corridors are described as follows:

- i.) Travel along SR 522 between SR 104 and 80th Ave. Northeast.
- ii.) Travel along 68th Ave. N.E./SR 522 between SR 104 and N.E. 170th St., using the existing roads.
- iii.) Travel along 68th Ave. N.E./Lakepointe Way N.E./SR 522 between SR 104 and N.E. 170th St. using the new roadway.

The data for each performance measure in 1993 is from the calibrated Transyt 7F model run. The data for the 2005 w/o project is the results of the No Action alternative. In all cases the system deteriorates from 1993 to 2005. With the project traffic added and Lakepointe Way N.E. added to the network, the 2005 w/project data shows route and system wide improvements over the 2005 w/o project data. The percentage change column (No Action to Proposed Action) shows the net change in performance measures in 2005 with and without the project. Again, the 2005 with project data reflects the major addition to the roadway network of Lakepointe Way N.E. and the added trips to the system reflected in Tables 3A and 3B and Figures 6 and 7.

In all cases the performance measures improved after the Lakepointe Project is implemented, with two exceptions. Total travel, total travel time, and total delay all decreased with the project, except the system wide total travel slightly increased because there is more roadway length to be traveled. The system speed increased in all cases, meaning vehicles traveled faster on average, with the project in place. The system improvements are the result of the added capacity provided by the new Lakepointe Way N.E. arterial connection. The Transyt 7F Model reflects the significant trip diversion away from the SR 522/68th Ave. N.E. intersection by way of Lakepointe Way Northeast. In all cases the percent stops increased, because there are three new traffic signals in the system.

Tables 5A and 5B also show the percent change from the NSCP Alternative to the Proposed Action Alternative. In all cases, the performance measures deteriorate or remain unchanged when comparing the Proposed Action against the NSCP alternative. Total travel and percent stops remain approximately unchanged. Travel time and total delay increase, and system speed decreases. Reasons for this deterioration include:

- i.) The cycle lengths of the proposed action analysis was 140 sec. (AM) and 150 Sec. (PM) vs. 180 Sec. for the NSCP alternative, to match the existing traffic operation.
- ii.) The roadway network is different as described in Section V.A.

b.) Level of Service Analysis

AM and PM peak hour levels of service (LOS) were evaluated for the 2005 without and 2005 with Lakepointe project traffic conditions. The levels of service were derived from the Transyt 7F runs. Transyt 7F was run with the system wide minimum delay optimization option per direction of the Interagency Review Team which directed the calibration of the Transyt 7F model. Because of the system wide nature of this option, it may penalize a given intersection for the benefit of the entire system.

Levels of service for existing conditions were obtained from the NSCP Lakepointe TA report starting on page 54. The 2005 without Lakepointe data is different from the NSCP Lakepointe TA report, Tables 9 and 10, because of the changed assumptions for the system cycle length and the 80th Ave. N.E. lane configuration. Table 6A shows the level of service comparison for the AM peak hour and Table 6B shows the comparison for the PM peak hour. The LOS results for the NSCP alternative reflect the assumptions used in that analysis, including the use of a 180 sec. cycle length for the traffic signal system in the future. All other results reflect the existing 140 sec. cycle length in the AM and 150 sec. cycle length in the PM peak hour.

Intersections 1, 5, 6 and 9 on Tables 6A and 6B are shown because they are included in the Transyt 7F analysis and are part of the assumed interconnected traffic system. However, all four of these intersections have less than 20% of the project trips flowing through them per Figures 6 and 7, and therefore, are excluded from the IS Significant Adverse Impacts per Section 60 of Ordinance 11617. This means that the projected traffic flow from the project falls below the threshold established by King County Ordinance for Intersection Standards and SEPA analysis for these four intersections.

i.) SR 522 at SR 104 and 68th Ave. N.E.

The intersections on SR 522 at SR 104 and 68th Ave. N.E. deteriorate to LOS F in 2005 without the project and stay at LOS F in 2005 with the project in both the AM and PM peak hours. At

68th Ave. N.E. there is an improvement in the AM because there are more trips removed from the intersection onto Lakepointe Way N.E. than added by the project. There is also an improvement in the PM, but it is not enough to be reflected in the average delay values reported. At SR 522/SR 104 the average delay increases with additional project traffic. These intersections are fully built out with no apparent additional capacity increases available without significant right of way purchases and/or grade separated roadways with ramps.

ii.) SR 522 at 61st Ave. N.E.

SR 522/61st Ave. N.E. has increased traffic volumes with and without the project. It stays at LOS F in the AM and deteriorates to LOS F in the PM with the traffic operations as recently constructed by WSDOT under the eastbound transit lane project. The intersection can be improved in operation by the provision of a separate southbound left turn lane and the implementation of a southbound right turn phase overlap (i.e. The southbound right turn lane would be controlled by a green arrow traffic signal indication when the southbound right turn has the right of way and this movement would be "overlapped" with the eastbound left turn movement that also is controlled by a green arrow indication. These two movements can proceed simultaneously because they do not conflict with each other. Pedestrian crossings are allowed on another phase of the traffic signal cycle.). The intersection improves to an average delay of 48.3 seconds in the AM peak hour (LOS E) and an average delay of 58.2 seconds in the PM peak hour (LOS E). Both of these improvements can be implemented with pavement marking changes and little or no pavement widening.

iii.) 68th Ave. N.E. at N.E. 175th St.

The intersection of 68th Ave. N.E. at N.E. 175th St. stays at LOS C or better under all alternatives, except in the PM under No Action where it deteriorates to LOS D. See the discussion under Traffic Queues regarding the impact of queues on this intersection.

iv.) 68th Ave. N.E. at N.E. 170th St.

The intersection of 68th Ave. N.E. at N.E. 170th St. stays at LOS D in the AM with and without the project in 2005. In the PM peak

hour, it deteriorates from LOS D in 1993 to E in 2005 without and F in 2005 with the project. This intersection can be improved to LOS D with the implementation of a westbound right turn phase overlap (i.e. westbound right turn would operate on a green right turn arrow simultaneously with the southbound left turn).

v.) Lakepointe Way N.E., N.E. 175th St. and N.E. Lakepointe Blvd. Intersections

The five new intersections on Lakepointe Way N.E. (@ SR 522, N.E. Lakepointe Blvd, 68th Ave. N.E. + 2 driveways) are projected to operate at LOS C or better in the AM and LOS D or better in the PM peak hour with the project in 2005. The three new driveways on N.E. 175th St. are projected to operate at LOS A in the AM and PM peak hour with single lane approaches and stop sign control of the driveways. The driveway intersections with N.E. Lakepointe Blvd. are expected to operate at LOS A in the AM and PM peak hours.

c.) Traffic Queues

Table 7 shows the results of the critical movement maximum back of queue length calculations from the Transyt 7F model at the six signalized intersections within the cordon line shown on Figures 6 and 7. The Movement Queue Capacity of Table 7 is based on the space available for storage at 25 ft. per vehicle.

The Movement Queue Capacity represents all storage in all lanes available for a particular movement at a red signal in terms of vehicles. The Movement Queue Capacity for a left turn movement is the left turn pocket length without extending into the adjacent through lane. The Movement Queue Capacity for the northbound left turn movement on 68th Ave. N.E. at Lakepointe Way N.E. includes the northbound inside lane across the Sammamish River Bridge and south to N.E. 175th St. because this lane is planned to only feed the left turn movement at Lakepointe Way Northeast.

Traffic queues are discussed on pages 62 through 64 of the NSCP Lakepointe TA report. Below is a summary of the revised traffic queuing results for each of the locations discussed in the NSCP Lakepointe TA report.

i.) SR 522 at 68th Ave. N.E.

The TRANSYT-7F runs show that the eastbound through movement queue at the SR 522/68th Ave. N.E. intersection will exceed the available queue capacity by about 28% (95 vs. 74 capacity) during the PM peak hour under 2005 Proposed Action conditions. Therefore, eastbound traffic may queue up to and beyond the new signalized intersection of SR 522/Lakepointe Way Northeast. With this queuing, traffic delays would be greater than stated in Table 6B for the SR 522/Lakepointe Way N.E. intersection, especially for the eastbound through and northbound right turn movements. During the AM peak hour, 50-96% (37 to 71 vs. 74 capacity) of the eastbound queue capacity at the SR 522/68th Ave. N.E. intersection is expected to be used.

The northbound left and through movements have a combined queue capacity of approximately 16 vehicles. The model projects that this capacity will be exceeded under all alternatives as well as the existing conditions. Thus, the intersection of N.E. 175th St. at 68th Ave. N.E. will continue to experience backups from SR 522, in both the AM and PM peak periods.

ii.) SR 522 at Lakepointe Way N.E.

A separate right turn lane, south of the eastbound transit lane recently constructed by WSDOT, is proposed for eastbound SR 522 for vehicles to turn right onto Lakepointe Way Northeast. With no pedestrians on this corner (see Section IV.B.1.b for discussion) and a widened receiving lane for concurrent left turns, this right turn lane is proposed to be free flow without traffic signal control. General purpose vehicles will need to merge into and cross the Transit only lane into the right turn lane in advance of any queue of buses that may be stopped in the eastbound transit only lane at the SR 522/Lakepointe Way N.E. traffic signal (estimated three buses, or 200 feet). The eastbound joint use of the Transit lane must extend nearly to 61st Ave. N.E. to avoid eastbound right turning vehicles being blocked by the eastbound through queue that may be created from 68th Ave. Northeast.

iii.) Lakepointe Way N.E. at 68th Ave. N.E.

The Lakepointe Way N.E./68th Ave. N.E. intersection is proposed to be constructed as a half-signal (the northbound through movement will receive continuous green time, except during

pedestrian crossings of 68th Ave. N.E.). The northbound through movement is expected to have short queues during both the AM and PM peak hours. These queues should not affect traffic operations at the upstream intersection of N.E. 170th St./68th Ave. Northeast. The northbound left turn movement queue at the Lakepointe Way N.E./68th Ave. N.E. intersection is also not expected to impact traffic operations at N.E. 170th St./68th Ave. Northeast. The single northbound inside lane across the bridge plus the added left turn lane north of the bridge has a queue capacity of more than 70 vehicles, with a projected demand of 20 vehicles.

The southbound approach to the Lakepointe Way N.E./68th Ave. N.E. intersection is expected to queue beyond the upstream intersection of N.E. 175th St./68th Ave. Northeast. This is due to the short distance between these two intersections, about 320 feet measured center-to-center. This southbound queue may extend back to SR 522.

iv.) SR 522 at 61st Ave. N.E.

At the SR 522/61st Ave. N.E. intersection, the eastbound left turn queue is not expected to exceed capacity during the PM peak hour with the Proposed Action. The estimated PM peak hour eastbound left turn queue is less than half of the queue found in the NSCP Lakepointe TA report TRANSYT-7F runs.

v.) N.E. 175th St. at 68th Ave. N.E.

The N.E. 175th St./68th Ave. N.E. intersection will not experience over capacity AM queues from its own operation, but may experience northbound queues from SR 522. Signal coordination timing may be able to be adjusted at N.E. 175th St. to accommodate this AM northbound queue. Any northbound queue not accommodated has storage capacity on the outside northbound lane on the Sammamish River Bridge and the approach to the unsignalized northbound lane at Lakepointe Way Northeast.

In the PM peak period, queues are expected at this intersection from both the signal to the north (SR 522, for northbound traffic) and the signal to the south (Lakepointe Way N.E. for southbound traffic).

vi.) Lakepointe Way N.E. at N.E. Lakepointe Blvd.

No traffic queuing problems are expected at the Lakepointe Way N.E./N.E. Lakepointe Blvd. intersection during the AM or PM peak hours with the Proposed Action.

vii.) Queue Over Capacity Comparisons

Table 7 shows that there is one location in the AM (effecting two intersections) and four locations in the PM (effecting four intersections) that are modeled to be over capacity for the Proposed Action. The NSCP Alternative would have four locations in the AM (effecting three intersections) and nine locations in the PM (effecting six intersections) that are modeled to be over capacity. The limitation of the model must be understood when making these comparisons. The existing system and all future alternatives show Level of Service F at SR 522/68th Ave. N.E. and resultant queuing to adjacent intersections.

2. Alternative Development Scenario (ADS)

The ADS trip generation produced slightly higher trip numbers than the Proposed Action. However, the numbers are close enough so that there would be no significant difference in the impacts to the surrounding street system. The largest difference between common turning movements from Figure 6 vs. Figure 10 is six trips for northbound 68th Ave. N.E. south of Lakepointe Way N.E., representing the AM peak hour. In the PM peak hour, the largest single movement difference is 38 trips turning right from Lakepointe Way N.E. to the north, per Figures 7 and 11. All other movements shown have lower differences, most in single digits.

The Transyt 7F analysis for the System-Wide and Major Corridor evaluation and the LOS for intersections are the same for the ADS as the Proposed Action.

3. Northshore Community Plan Design Alternative

The Transportation Operation Analysis including the Transyt 7F evaluation and LOS results for the Northshore Community Plan Design Alternative are shown in the NSCP Lakepointe TA report on pp. 41-64. The results are included on Tables 5A, 5B, 6A, 6B and 7. However, the results of the NSCP alternative analysis are not directly comparable to the Proposed Action results as explained in Section V.B.I.

The NSCP Lakepointe TA report compared LOS results in 2005 with and without the NSCP alternative, using a signal cycle length of 180 sec. as shown in Tables 9 and 10, pp 58 and 59, NSCP Lakepointe TA report. The results are shown in the Tables with 1993 Existing LOS using 140 sec. in the AM and 150 sec. in the PM. The LOS differences in 1993 vs. 2005 without the project and 2005 with the NSCP alternative are described in detail on pp 59-61 of the NSCP Lakepointe TA report.

C. Parking

Table 8 shows the parking requirements per King County Code and the parking provided in the Proposed Action, by "Parcel". The data shows that 4,508 parking stalls are planned, which is a surplus of 320 stalls above the code requirements. The parcels are identified in the Revised Commercial Site Development Permit plan set, Dec. 23, 1996. The data in Table 8 is from Sheet A2.2 of that plan set.

D. Restricted Access

The construction of a new traffic signal on SR 522 at Lakepointe Way N.E. would create the need to prohibit left turn access to and from SR 522 in the vicinity of the intersection. The new traffic signal and a dedicated westbound to southbound signalized left turn lane would require these turn prohibited. The existing connection between SR 522 and N.E. 175th St. at 65th Ave. N.E. would be removed and Lakepointe Way N.E. would enter SR 522 in the same vicinity. Sixty Fifth Ave. N.E. between SR 522 and N.E. 181st St. would remain with left turns prohibited at SR 522. Westbound right turns in and out of 65th Ave. N.E. would remain at a stop sign controlled 'T' intersection just east of the new Lakepointe Way N.E. intersection with SR 522.

Left turns into and out of several private businesses on the north side of SR 522 would also need to be prohibited. The approximate limits of the prohibitions are estimated to be 67th Ave. N.E. to the east and 250 feet west of 65th Ave. N.E. to the west. This would effect U.S. Bank, the BP gasoline station, the Nu Lite Restaurant, a commercial building and the Texaco gasoline station. Left turns to and from 67th Ave. N.E. may be allowed to remain, depending upon WSDOT requirements. This will be determined in the Design Memo being prepared concurrently with the Environmental documentation.

Left turns into and out of four driveways to the businesses west of 61st Ave. N.E. may be impacted by these pavement marking changes. The impact may range from no change to left turn restrictions, depending upon the traffic operation analysis of the pavement marking changes approved by King County.

E. Construction Traffic

The project is projected to be constructed in six phases, plus a seventh phase for a parcel to be rezoned under a separate SEPA process. Phase 1 will comprise approximately 20 acres of mixed use development and include 107,500 sq. ft. of commercial, retail and office space, 600 apartment units, 158,600 sq. ft. of cinema, retail and food court space, 1945 parking spaces on the surface and lower level, and Lakepointe Way N.E. from 68th Ave. N.E. to SR 522. Phase 1 will take 12 - 18 months to construct. Phases 2-6 will follow to meet the market demand, in approximately one year increments. After phase 1, construction activities will co-exist with then existing residents and commercial tenants/customers of Phase 1.

Table 9 shows the estimated truck and construction workers vehicles for Phase 1 and Phases 2-6. The number of trucks were estimated by Leduc Industries, Inc. on a weekly basis, assuming a four year construction period. The road and bridges estimate was compressed into a single 18 month construction phase. The earthwork estimate is derived from estimated excavation and embankment quantities. The on-site relocation of earth will use the most efficient method available for the quantities needing to be relocated.

The concrete trucks are assumed to come from the Lone Star concrete plant which is on the site of the future Phase 7. During Phase 1 the concrete trucks can either use N.E. 175th St. or use a "back gate" to access the road and building construction without using a public street. Other trucks will access the site via N.E. 175th St., using the traffic signal at the 68th Ave. N.E. intersection. Construction workers will use 61st Ave. N.E., 65th Ave. N.E. (as long as it remains open to traffic) and 68th Ave. N.E. to reach N.E. 175th St. and the site. Construction workers will park in temporary lots on-site in surplus constructed parking stalls in later phases, if available.

During Phases 2 - 5 all trucks, including concrete trucks will access the site via the service road under Lakepointe Way N.E. or a temporary access through Phase 6 and N.E. Lakepointe Blvd. Construction workers will use either the service road or N.E. Lakepointe Blvd., depending upon their direction of travel and their parking location. Phase 6 construction traffic is expected to enter that site directly from N.E. 175th St.

Table 3B shows a total existing use reduction of 1,116 trips per day and 93 trips during each peak hour. This trip reduction will phase in over the life of the construction project, as existing uses are closed for clearing and demolition on a phase by phase basis.

Phase 1 of the construction effort will construct Lakepointe Way N.E., adding it's capacity to the roadway system, prior to phase 2 - 6 residential and commercial

users being added to the transportation demand. Therefore, Phase 1 will construct the capacity to handle Phases 2 - 6 construction traffic.

The intersection of 68th Ave. N.E. and N.E. 175th St. will have 2-8 additional peak hour truck trips during the project construction. Most of the truck trips will also use the SR 522 intersections. An additional 144 construction worker vehicle trips are projected during the AM and PM peak hours, partially off-set by reduced on-site user vehicles during Phase 1 and further offset by increased roadway capacity created during Phase 1 for Phases 2 - 6 .

No significant traffic operational impacts are anticipated.

VI. FUNDING OF PUBLIC AND PRIVATE TRANSPORTATION IMPROVEMENTS

Lakepointe Way N.E. from SR 522 to 68th Ave. N.E. (including the intersection improvements), N.E. Lakepointe Blvd. from Lakepointe Way N.E. to the round-a-bout near the hotel entrance (between phases D, C-2, E-1 and E-2) and the pedestrian street (between phases C-1 and C-2) are proposed to be public roadways in dedicated King County right of ways, constructed with funding through a Road Improvement District (RID). The reconstruction of N.E. 175th St. and the Burke Gilman Trail in the vicinity of the Lakepointe Way N.E. overcrossing would be part of the RID project. The Transit stops on the north and south sides of SR 522 and the connection to the Burke Gilman Trail would also be part of the RID. The RID may also include a pedestrian bridge over SR 522, pedestrian improvements to the Sammamish Slough bridge at 68th Ave. N.E. and the required fire lanes on the project site.

Lakepointe Way N.E., N.E. Lakepointe Blvd. and the local access roadway underneath Lakepointe Way N.E. is proposed to be owned by King County. Maintenance of the public roads would be by King County.

All on-site driveways, access roads, parking areas and pedestrian and bicycle features would be constructed and maintained with private funding.

VII. MITIGATION

A discussion will be provided in the EIS of Mitigation Payment System (MPS) fees, the Northshore Community Plan P-suffix transportation-related conditions for the Kenmore Pre-Mix site, transportation conditions established through the zoning actualization, and transportation improvements which are part of the transportation agreement between Lakepointe and King County.

Table 10 shows the Transportation mitigation for the Proposed Action, and compares them with the NSCP Lakepointe TA Report per Table 11, P. 24. As mitigation for the transportation impacts of the Lakepointe Development Proposed

Action the proponent would provide the roadway improvement projects shown in Table 9 and following:

1. Pay the County Code required Mitigation Payment System (MPS) fees as determined by the County after credits are applied for the cost of Lakepointe Way N.E. construction and other applicable roadway improvement costs as determined by the SEPA review process.
2. Construct Lakepointe Way N.E. and other applicable roadway improvements in accordance with the Design Memo (preliminary engineering report for off-site road improvements identifying design criteria) that is concurrently being prepared with the Environmental Impact Statement, with full credit against the required MPS fees. Excess credits, if any, will be applied to future impact mitigation or MPS fees that may be required of future phases of the Lakepointe Development.
3. Construct a transit stop on each side of SR 522 east of Lakepointe Way N.E. with access to the Burke Gilman Trail per WSDOT and King County Metro standards.
4. Develop and enforce a Transportation Management Plan (TMP) to be approved by King County.

VIII. UNAVOIDABLE ADVERSE IMPACTS

The level of service (LOS) at the intersection of SR 522 at 68th Ave. N.E. is now at LOS F and is projected to continue to operate at LOS F in 2005 without the proposed action and does not improve enough with the proposed action to provide meaningful calculations for average delay to determine the LOS. There is no apparent improvement to capacity that can be made to this intersection without major right of way acquisition and local business disruption. Traffic queues will continue to exceed the storage capacity at several locations and affect the traffic operation at adjacent intersections.

TABLE 3A

**TRIP GENERATION RATES - PROPOSED ACTION
LAKEPOINTE MIXED-USE DEVELOPMENT**

Total Site	Land Use	ITE Code	Quantity	Rates Daily	Rates AM			Rates PM		
					IN	OUT	TOTAL	IN	OUT	TOTAL
Residential	Apartment	220	0	6.28	0.11	0.33	0.44	0.31	0.18	0.49
	Mid Rise Apartment	223	700	3.90	0.10	0.20	0.30	0.23	0.16	0.39
	Condo/Townhouse	230	100	5.86	0.07	0.37	0.44	0.36	0.19	0.55
	High Rise Condo	232	0	4.18	0.06	0.28	0.34	0.23	0.14	0.37
	Retirement Community	250	200	2.04	0.08	0.09	0.17	0.16	0.12	0.28
	Extended Care Senior	253	200	0.80	0.02	0.03	0.05	0.06	0.02	0.08
	Sub-Total Residential									
	On-site workers (1)									
	On-site shopping (2)									
	Transit/TDM (3)									
Total Residential 1200										
Office	Office Building	710	100100	14.03	1.70	0.21	1.91	0.32	1.54	1.86
	Med. Office Building	720	91730	35.92	2.07	0.62	2.69	1.18	2.75	3.93
	Sub-Total Office									
	Work On-site (Residential)(1)									
	Office/Shopping Captured (4)									
Total Office 191830										
Shopping	Shopping Center	820	191082	55.44	0.78	0.46	1.25	2.59	2.59	5.19
	Shopping On-site (Residential)(2)									
	Office/Shopping Captured (4)									
	Pass-by (5)									
Total Shopping 191082										
Misc.	Movie Theater	443	8	77.79	0.41	0.41	0.82	22.56	1.44	24.00
	Hotel (5)	310	120	8.7	0.4	0.27	0.67	0.41	0.35	0.76
	Health Club	493	36270	40	0.14	0.16	0.3	2.58	1.72	4.30
	Health Club Pass-by (6)									
	Tot Health Club									
Total Misc. 36270										
Total External trips										
Existing use reduction (7)										
Net New Offsite Trips										

- (1) Reduction of residential trips by 5% for inbound PM peak and outbound AM peak hour trips.
 (2) Reduction of 10% for PM peak hour residential trips
 (3) Reduction of 15% to account for transit use and other TDM measures.
 (4) Reduction of 9% for daily and 15% AM peak hour shopping trips and 15% PM peak hour office trips to account for office/shopping captured trips.
 (5) ITE rates are for occupied rooms, with 80% of total rooms occupied on a daily basis.
 (6) ITE equations for passby trips yielded 36% based on size and 40% based on ADT of 50,000. Average of 38% was used
 (7) Reduction of trips generated by existing on-site uses to be replaced by the project. Based on actual PM peak hour traffic count.

TABLE 3B

**TRIP GENERATION ESTIMATES - PROPOSED ACTION
LAKEPOINTE MIXED-USE DEVELOPMENT**

Total Site	Land Use	ITE Code	Quantity	Trips Daily	Trips AM		Trips PM		TOTAL	TOTAL
					IN	OUT	IN	OUT		
Residential	Apartment	220	0	0	0	0	0	0	0	0
	Mid Rise Apartment	223	700	2730	70	140	210	161	112	273
	Condo/Townhouse	230	100	586	7	37	44	36	19	55
	High Rise Condo	232	0	0	0	0	0	0	0	0
	Retirement Community	250	200	408	16	18	34	32	24	56
	Extended Care Senior	253	200	160	4	6	10	12	4	16
	Sub-Total Residential			3884	97	201	298	241	159	400
	On-site workers (1)			(121)		(10)	(10)	(12)		(12)
	On-site shopping (2)			(388)	(10)	(20)	(30)	(24)	(16)	(40)
	Transit/TDM (3)			(506)	(13)	(26)	(39)	(31)	(21)	(52)
	Total Residential		1200	2869	74	145	219	174	122	296
Office	Office Building	710	100100	1404	170	21	191	32	154	186
	Med. Office Building	720	91730	3295	190	57	247	108	253	361
	Sub-Total Office			4699	360	78	438	140	407	547
	Work On-site (Residential)(1)			(121)	(10)		(10)		(12)	(12)
	Office/Shopping Captured (4)			(423)	(13)	(22)	(36)	(21)	(61)	(82)
	Transit/TDM (3)			(587)	(53)	(12)	(64)	(21)	(59)	(80)
	Total Office		191830	3469	284	44	328	98	275	373
Shopping	Shopping Center	820	191082	10593	150	88	238	496	496	991
	Shopping On-site (Residential)(2)			(388)	(20)	(10)	(30)	(16)	(24)	(40)
	Office/Shopping Captured (4)			(423)	(22)	(13)	(36)	(61)	(21)	(82)
	Pass-by (5)			(3,878)	(49)	(30)	(79)	(182)	(179)	(361)
	Total Shopping		191082	5904	58	35	93	236	271	508
Misc.	Movie Theater	443	8	622	3	3	7	180	12	192
	Hotel (5)	310	120	1044	48	32	80	49	42	91
	Health Club	493	36270	1451	5	6	11	94	62	156
	Health Club Pass-by (6)			(551)	(2)	(2)	(4)	(36)	(24)	(59)
	Tot Health Club			899	3	4	7	58	39	97
	Total Misc.		36270	2,566	54	39	94	288	92	380
	Total External trips			14808	471	263	734	796	760	1556
	Existing use reduction (7)			(1,116)	(55)	(28)	(93)	(39)	(54)	(93)
	Net New Offsite Trips			13692	406	235	641	757	706	1463

(1) Reduction of residential trips by 5% for inbound PM peak and outbound A M peak hour trips.

(2) Reduction of 10% for PM peak hour residential trips

(3) Reduction of 15% to account for transit use and other TDM measures.

(4) Reduction of 9% for daily and 15% AM peak hour shopping trips and 15% PM peak hour office trips to account for office/shopping captured trips.

(5) ITE rates are for occupied rooms, with 80% of total rooms occupied on a daily basis.

(6) ITE equations for passby trips yielded 36% based on size and 40% based on ADT of 50,000. Average of 38% was used

(7) Reduction of trips generated by existing on-site uses to be replaced by the project. Based on actual PM peak hour traffic count.

TABLE 4A

**TRIP GENERATION RATES - ALTERNATIVE DEVELOPMENT SCENARIO
LAKEPOINTE MIXED-USE DEVELOPMENT**

Total Site	Land Use	ITE Code	Quantity	Rates Daily			Rates AM			Rates PM		
				IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Residential	Apartment	220	0	6.28	0.11	0.33	0.44	0.31	0.18	0.49		
	Mid Rise Apartment	223	600	3.90	0.10	0.20	0.30	0.23	0.16	0.39		
	Condo/Townhouse	230	200	5.86	0.07	0.37	0.44	0.36	0.19	0.55		
	High Rise Condo	232	0	4.18	0.06	0.28	0.34	0.23	0.14	0.37		
	Retirement Community	250	200	2.04	0.08	0.09	0.17	0.16	0.12	0.28		
	Extended Care Senior	253	200	0.80	0.02	0.03	0.05	0.06	0.02	0.08		
	Sub-Total Residential											
	On-site workers (1)											
	On-site shopping (2)											
	Transit/TDM (3)											
Office	Total Residential		1200									
	Office Building	710	187858	12.03	1.48	0.18	1.66	0.27	1.31	1.57		
	Med. Office Building	720	91730	35.92	2.07	0.62	2.69	1.18	2.75	3.93		
	Sub-Total Office											
	Work On-site (Residential)(1)											
	Office/Shopping Captured (4)											
Shopping	Transit/TDM (3)											
	Total Office		279588									
	Shopping Center	820	244932	50.51	0.71	0.42	1.12	2.37	2.37	4.74		
	Shopping On-site (Residential)(2)											
	Office/Shopping Captured (4)											
	Pass-by (5)											
Misc.	Total Shopping		244932									
	Movie Theater	443	8	77.79	0.41	0.41	0.82	22.56	1.44	24.00		
	Hotel	310	0	8.7	0.4	0.27	0.67	0.41	0.35	0.76		
	Health Club	493	36270	40	0.14	0.16	0.3	2.58	1.72	4.30		
	Health Club Pass-by (5)											
	Tot Health Club											
	Total Misc.		36270									
	Total External trips											
	Existing use reduction (6)											
	Net New Offsite Trips											

(1) Reduction of residential trips by 5% for inbound PM peak and outbound AM peak hour trips.

(2) Reduction of 10% for PM peak hour residential trips.

(3) Reduction of 15% to account for transit use and other TDM measures.

(4) Reduction of 9% for daily and 15% AM peak hour shopping trips and 15% PM peak hour shopping trips to account for office/shopping captured trips.

(5) ITE equations for passby trips yielded 36% based on size and 40% based on ADT of 50,000. Average of 38% was used.

(6) Reduction of trips generated by existing on-site uses to be replaced by the project. Based on actual PM peak hour traffic count.

TABLE 4B

**TRIP GENERATION ESTIMATES - ALTERNATIVE DEVELOPMENT SCENARIO
LAKEPOINTE MIXED-USE DEVELOPMENT**

Total Site	Land Use	ITE Code	Quantity	Trips Daily	Trips AM		Trips PM		TOTAL
					IN	OUT	IN	OUT	
Residential	Apartment	220	0	0	0	0	0	0	0
	Mid Rise Apartment	223	600	2340	60	120	180	138	96
	Condo/Townhouse	230	200	1172	14	74	88	72	38
	High Rise Condo	232	0	0	0	0	0	0	0
	Retirement Community	250	200	408	16	18	34	32	24
	Extended Care Senior	253	200	160	4	6	10	12	4
	Sub-Total Residential		4080	4080	94	218	312	254	162
	On-site workers (1)		(127)	(127)	(11)	(11)	(11)	(13)	(13)
	On-site shopping (2)		(408)	(408)	(9)	(22)	(31)	(25)	(16)
	Transit/TDM (3)		(532)	(532)	(13)	(28)	(40)	(32)	(22)
	Total Residential		1200	3013	72	158	229	184	124
Office	Office Building	710	187858	2260	277	34	312	50	246
	Med. Office Building	720	91730	3295	190	57	247	108	253
	Sub-Total Office		5555	5555	467	91	558	159	498
	Work On-site (Residential)(1)		(127)	(127)	(11)	(11)	(11)	(13)	(13)
	Office/Shopping Captured (4)		(500)	(500)	(15)	(26)	(41)	(24)	(75)
	Transit/TDM (3)		(814)	(814)	(68)	(14)	(82)	(24)	(73)
	Total Office		279588	4114	373	51	424	111	338
	Shopping Center	820	244932	12371	173	102	275	581	581
	Shopping On-site (Residential)(2)		(408)	(408)	(22)	(9)	(31)	(16)	(25)
	Office/Shopping Captured (4)		(500)	(500)	(26)	(15)	(41)	(75)	(24)
	Total Shopping		244932	6917	68	42	110	275	320
Misc.	Movie Theater	443	8	622	3	3	7	180	12
	Hotel	310	0	0	0	0	0	0	0
	Health Club	493	36270	1451	5	6	11	94	62
	Health Club Pass-by (5)		(551)	(551)	(2)	(2)	(4)	(36)	(24)
	Tot Health Club		899	899	3	4	7	58	39
	Total Misc.		36270	1,522	6	7	13	238	50
	Total External trips		15566	15566	519	258	777	808	832
	Existing use reduction (6)		(1,116)	(1,116)	(65)	(28)	(93)	(39)	(54)
	Net New Offsite Trips		14450	14450	454	230	684	769	778
	Total		244932	6917	68	42	110	275	320

(1) Reduction of residential trips by 5% for inbound PM peak and outbound AM peak hour trips.

(2) Reduction of 10% for PM peak hour residential trips.

(3) Reduction of 15% to account for transit use and other TDM measures.

(4) Reduction of 9% for daily and 15% AM peak hour shopping trips and 15% PM peak hour shopping trips to account for office/shopping captured trips.

(5) ITE equations for passby trips yielded 36% based on size and 40% based on ADT of 50,000. Average of 38% was used.

(6) Reduction of trips generated by existing on-site uses to be replaced by the project. Based on actual PM peak hour traffic count.

TABLE 5A

AM PEAK HOUR ROUTE PERFORMANCE SUMMARY
LAKEPOINTE MIXED-USE DEVELOPMENT

ROUTE	PERFORMANCE MEASURE	1993	NO ACTION (2005 W/O PROJECT)	NSCP ALTERNATIVE (2005 W/PROJECT)	PROPOSED ACTION (2005 W/PROJECT)	% CHANGE (NO ACTION TO PROPOSED ACTION)	% CHANGE (NSCP ALT. TO PROPOSED ACTION)
SYSTEM-WIDE	Total Travel (Veh.-Mi.)	9,356	10,904	11,026	10,928	+0%	-0%
	Total Travel Time (Veh.-Hr.)	481	1,169	731	993	-15%	+36%
	Total Delay (Veh.-Hr.)	200	841	395	661	-21%	+67%
	Percent Stops	51	56	65	61	+9%	-6%
	System Speed (Mi./Hr.)	19.5	9.3	15.1	11.0	+18%	-27%
MAJOR CORRIDORS							
SR 522 Only (Between SR 104 and 80th Ave. N.E.)	Total Travel (Veh.-Mi.)	7,049	7,956	7,671	7,683	-3%	+0%
	Total Travel Time (Veh.-Hr.)	281	492	368	450	-9%	+22%
	Total Delay (Veh.-Hr.)	78	263	148	229	-13%	+55%
	Percent Stops	51	56	62	71	+27%	+15%
	System Speed (Mi./Hr.)	25.1	16.2	20.8	17.1	+6%	-18%
68th Ave. N.E./ SR 522 (Between SR 104 and N.E. 170th St. via SR 522 & 68th)	Total Travel (Veh.-Mi.)	5,224	5,953	5,170	5,216	-12%	+0%
	Total Travel Time (Veh.-Hr.)	235	487	288	396	-19%	+38%
	Total Delay (Veh.-Hr.)	28	304	132	238	-22%	+80%
	Percent Stops	39	46	70	64	+39%	-9%
	System Speed (Mi./Hr.)	22.2	12.2	17.9	13.2	+8%	-26%
68th Ave. N.E./ Lakepointe Wy./ SR 522 (Between SR 104 and N.E. 170th St. Via SR 522, Lakepointe Way & 68th)	Total Travel (Veh.-Mi.)	--	--	4,682	4,523	--	-3%
	Total Travel Time (Veh.-Hr.)	--	--	251	359	--	+43%
	Total Delay (Veh.-Hr.)	--	--	107	222	--	+107%
	Percent Stops	--	--	64	67	--	+5%
	System Speed (Mi./Hr.)	--	--	18.7	12.6	--	-33%

TABLE 5B

**PM PEAK HOUR ROUTE PERFORMANCE SUMMARY
LAKEPOINTE MIXED-USE DEVELOPMENT**

ROUTE	PERFORMANCE MEASURE	1993	NO ACTION (2005 W/O PROJECT)	NSCP ALTERNATIVE (2005 W/PROJECT)	PROPOSED ACTION (2005 W/PROJECT)	% CHANGE (NO ACTION TO PROPOSED ACTION)	% CHANGE (NSCP ALT. TO PROPOSED ACTION)
SYSTEM-WIDE							
	Total Travel (Veh.-Mi.)	11,924	13,967	14,242	14,035	+1%	-1%
	Total Travel Time (Veh.-Hr.)	787	2,947	1,731	2,534	-14%	+46%
	Total Delay (Veh.-Hr.)	437	2,527	1,298	2,109	-17%	+62%
	Percent Stops	54	55	62	60	+9%	-3%
	System Speed (Mi./Hr.)	15.1	4.7	8.2	5.5	+17%	-33%
MAJOR CORRIDORS							
SR 522 Only (Between SR 104 and 80th Ave.N.E.)	Total Travel (Veh.-Mi.)	8,543	9,779	9,449	9,525	-3%	+0%
	Total Travel Time (Veh.-Hr.)	465	1,301	750	1,112	-15%	+48%
	Total Delay (Veh.-Hr.)	220	1,020	479	838	-18%	+75%
	Percent Stops	54	54	64	63	+17%	-2%
	System Speed (Mi./Hr.)	18.4	7.5	12.6	8.6	+15%	-32%
68th Ave. N.E./SR 522 (Between SR 104 and N.E. 170th St. Via SR 522 & 68TH)	Total Travel (Veh.-Mi.)	5,920	6,787	5,888	6,023	-11%	+2%
	Total Travel Time (Veh.-Hr.)	330	927	452	628	-32%	+39%
	Total Delay (Veh.-Hr.)	156	720	275	477	-34%	+73%
	Percent Stops	47	44	60	63		+5%
	System Speed (Mi./Hr.)	18.0	7.3	13.0	9.6		-26%
68th Ave. N.E./ Lakepointe Wy SR 522 (Between SR 104 and N.E. 70th St. Via SR 522, Lakepointe Way & 68th)	Total Travel (Veh.-Mi.)	--	--	5,617	5,354		-5%
	Total Travel Time (Veh.-Hr.)	--	--	428	540		+26%
	Total Delay (Veh.-Hr.)	--	--	255	378		+48%
	Percent Stops	--	--	59	69		+17%
	System Speed (Mi./Hr.)	--	--	13.1	9.9		-24%

TABLE 6A

**AM PEAK HOUR INTERSECTION LEVEL OF SERVICE (PER TRANSYT 7F)
LAKEPOINTE MIXED-USE DEVELOPMENT**

INT. NO. (See Figure 12)	INTERSECTION	1993			NO ACTION (2005 W/O PROJECT)			NSCP ALTERNATIVE ⁶ (2005 W/PROJECT)			PROPOSED ACTION (2005 W/PROJECT)		
		LOS	DELAY ¹	V/C ²	LOS	DELAY ¹	V/C ²	LOS	DELAY ¹	V/C ²	LOS	DELAY ¹	V/C ²
1	SR 522/SR 104	D	29.8	0.92	F	60.5	1.03	D	37.1		F	62.3	1.03
2	SR 522/61st Ave. N.E.	D	28.2	1.04	F	90.9	1.05	E	53.2		F ³	115.3	1.11
3	SR 522/Lakepointe Way N.E.	A	0.1	0.55	A	1.0	0.62	C/D	25.5		C	17.6	0.70
4	SR 522/68th Ave. N.E.	F	63.8	1.03	F	>120	>1.20	F	91.3		F	84.8	1.02
5	SR 522/73rd Ave. N.E.	C	19.7	0.68	C	17.1	0.81	C	22.7		D	27.2	0.81
6	SR 522/80th Ave. N.E.	D	25.1	0.67	D	29.5	0.97	C	18.2		D ⁴	27.3	0.87
7	68th Ave. N.E./N.E. 175th St.	B	7.3	0.42	B	7.8	0.69	B	10.4		B	5.9	0.56
8	68th Ave. N.E./Lakepointe Way N.E.	--	--	--	--	--	--	E	48.7		B	11.5	0.60
9	68th Ave. N.E./N.E. 170th St.	D	31.0	0.65	F	>120	1.20	E	43.5		F ⁵	>120	1.20
10	Lakepointe Way N.E./N.E. Lakepointe Blvd.	--	---	--	--	--	--	D	32.2		C	19.0	0.34
11	Lakepointe Wy.N.E./East Site Access	--	--	--	--	--	--	--	--		A	0.0	N/A
12	Lakepointe Wy.N.E./West Site Access	--	--	--	--	--	--	--	--		A	0.0	N/A
13	N.E. Lakepointe Blvd./Retail Driveways	--	--	--	--	--	--	--	--		A	1.1	N/A

¹ Average delay per vehicle for the overall intersection expressed in seconds per vehicle.

² V/C is reported for the worst case traffic movement at the intersection.

³ LOS can be improved to LOS E (48.3 seconds delay per vehicle) with construction of an exclusive southbound left turn lane and implementation of a southbound right turn phase overlap.

⁴ LOS can be improved to LOS C (18.3 seconds delay per vehicle) with construction of an exclusive southbound right turn lane.

⁵ LOS can be improved to LOS D (32.6 seconds delay per vehicle) with implementation of a westbound right turn phase overlap.

⁶ NSCP Lakepointe TA analysis assumptions and results, including 180 second cycle length.

TABLE 6B

**PM PEAK HOUR INTERSECTION LEVEL OF SERVICE (PER TRANSYT 7F)
LAKEPOINTE MIXED-USE DEVELOPMENT**

INT. NO.	INTERSECTION	1993			NO ACTION (2005 W/O PROJECT)			NSCP ALTERNATIVE ⁶ (2005 W/PROJECT)			PROPOSED ACTION (2005 W/PROJECT)		
		LOS	DELAY ¹	V/C ²	LOS	DELAY ¹	V/C ²	LOS	DELAY ¹	V/C ²	LOS	DELAY ¹	V/C ²
1	SR 522/SR 104	F	83.1	1.03	F	>120	1.17	F	>120	F	F	>120	1.17
2	SR 522/61st Ave. N.E.	C	24.7	0.96	E	41.6	1.01	E	55.0	F ³	F ³	94.2	>1.20
3	SR 522/Lakepointe Way N.E.	A	0.2	0.60	A	0.5	0.71	D	27.4	C	C	15.8	0.83
4	SR 522/68th Ave. N.E.	F	>120	1.13	F	>120	>1.20	F	>120	F	F	>120	>1.20
5	SR 522/73rd Ave. N.E.	D	26.1	0.80	D	32.9	0.94	D	33.0	D	D	36.4	0.98
6	SR 522/80th Ave. N.E.	C	18.7	0.89	F	108.1	1.09	C	23.2	F ⁴	F ⁴	>120	1.11
7	68th Ave. N.E./N.E. 175th St.	C	21.7	0.78	D	25.1	0.78	B	13.9	C	C	16.0	0.48
8	68th Ave. N.E./Lakepointe Way N.E.	--	--	--	--	--	--	E	46.2	C	C	20.2	0.77
9	68th Ave. N.E./N.E. 170th St.	D	27.1	0.79	F	>120	>1.20	E/F	59.7	F ⁵	F ⁵	>120	>1.20
10	Lakepointe Way N.E./N.E. Lakepointe Blvd.	--	--	--	--	--	--	E	43.5	D	D	31.7	0.50
11	Lakepointe Wy.N.E./East Site Access	--	--	--	--	--	--	--	--	A	A	0.3	N/A
12	Lakepointe Wy.N.E./West Site Access	--	--	--	--	--	--	--	--	A	A	0.8	N/A
13	N.E. Lakepoint Blvd./Retail Driveways	--	--	--	--	--	--	--	--	A	A	1.9	N/A

¹ Average delay per vehicle for the overall intersection expressed in seconds per vehicle.

² V/C is reported for the worst case traffic movement at the intersection.

³ LOS can be improved to LOS E (58.2 seconds delay per vehicle) with provision for an exclusive southbound left turn lane and implementation of a southbound right turn overlap phase.

⁴ Delay can be improved to 77.0 seconds per vehicle (LOS F) with construction of an exclusive southbound right turn lane.

⁵ Delay can be improved to 60.6 seconds per vehicle (LOS E/F) with implementation of a westbound right turn phase overlap.

⁶ NSCP Lakepointe TA analysis assumptions and results, including 180 second cycle length.

TABLE 7
2005 WITH PROJECT VEHICLE QUEUING AT SELECTED LOCATIONS
LAKEPOINTE DEVELOPMENT

INTERSECTION	MOVEMENT	AM PEAK HOUR		PM PEAK HOUR		MOVEMENT QUEUE CAPACITY (VEH.)
		PROPOSED ACTION (VEH.)	NSCP ALT. (VEH.)	PROPOSED ACTION (VEH.)	NSCP ALT. (VEH.)	
SR 522/ 61st Ave. N.E. ¹	EBLT	7	9	13	29	16
	EBTH	48	44	68	69	257
	WBLT	4	2	1	1	5
	WBTH	97	73	58	81	128
SR 522/ Lakepointe Way N.E.	EBTH	39	46	36	43	128
	WBLT	2	3	3	10	6
	WBTH	21	53	34	21	74
	NBLT	11	29	25	37	60
	NBRT	0	3	2	2	30
SR 522/ 68th Ave. N.E.	EBLT	2	3	4	6	18
	EBTH	72	51	95	90	74
	WBLT	10	13	35	44	47
	WBTH	41	59	34	68	95
	NBLT/TH	19	26	43	39	16
	NBRT	5	11	2	30	8
N.E. 175th St./ 68th Ave. N.E.	NBLT/TH/RT	3	3 ²	26	5 ²	19
	SBLT/TH/RT	3	21 ²	11	20 ²	16
Lakepointe Way N.E./ 68th Ave. N.E.	NBLT	18	56 ³	20	50 ³	70
	NBTH	27	56 ³	18	50 ³	60
	SBTH/RT	14	37	34	33	19
	EBLT	1	3	4	6	11
	EBRT	2	23	24	36	45
Lakepointe Way N.E./ N.E. Lakepointe Blvd.	EBLT	1	1	0	5	9
	EBTH	17	16	17	23	60
	EBRT	1	6	2	9	10
	WBLT	1	7	4	16	15
	WBTH	2	23	19	25	45
	WBRT	0	8	4	3	6
	NBLT	2	7	6	20	13
	NBTH/RT	2	5 ⁴	5	13 ⁴	6

TABLE 7 Notes:

Shaded cells indicate a queue which exceeds capacity.

- ¹ AM peak hour vehicle queuing can be improved at this intersection to EBLT = 7 veh., EBTH = 40 veh., WBLT = 2 veh., WBTH = 71 veh. with construction of a southbound left turn pocket. PM peak hour vehicle queuing can be improved to EBLT = 12 veh., EBTH = 47 veh., WBLT = 1 veh., WBTH = 55 veh. with this improvement.
- ² The NSCP alternative showed NB and SB left turn pockets at this intersection. The vehicle queue shown is the greater queue for the left turn and through movements on each approach.
- ³ The NSCP alternative assumed a northbound approach to this intersection consisting of a left only lane, a left/through shared lane and a through only lane. The vehicle queue shown is for the left and through movements combined.
- ⁴ The NSCP alternative assumed a northbound approach to this intersection consisting of a left only lane, a through only lane and a right only lane. The vehicle queue shown is the greater queue for the through and right movements on this approach.

TABLE 8

**ON-SITE PARKING - PROPOSED ACTION
LAKEPOINTE MIXED-USE DEVELOPMENT**

PARCELS	COMMERCIAL		HOUSING			PARKING	
	Retail/Etc. (sq. Ft.)	Office (Sq. Ft.)	Apartment Units	Senior Housing Apt. Units	Condo Units	KCC 21A-18 Parking Required	Parking as Designed (Drwgs Dated 7/15/96)
"A"	87,669	---	240	400	---	852	1,202
"B"	99,333	60,000	---	---	---	897	743
"C.1" C.2 C.3	54,255	40,100	240	---	---	524	744
"D/E.1" Hotel Health Club	161,100 36,270	---	---	---	100	1,208	954
"E.2"	---	---	220	---	---	300	432
"F"	52 Total Slips					26	0
"G.1" G.2	---	105,488	---	---	---	351	433
TOTAL	438,627	205,588	700	400	100	4,188	4,508
GRAND TOTAL	644,215 Gross Sq. Ft. Commercial Space		1,200 Dwelling Units				

Data from Lakepointe Development, Revised Commercial Site Development permit, Dec 23, 1996, Sheet A2.2

TABLE 9
CONSTRUCTION TRAFFIC¹
LAKEPOINTE DEVELOPMENT

	<i>PHASE 1 (Includes Lakepointe Way N.E.)</i>			<i>PHASE 2-6</i>		
	<i>TRUCKS PER WEEK</i>	<i>TRUCKS PER DAY</i>	<i>VEHICLE TRIPS, PEAK HR USING STREETS</i>	<i>TRUCKS PER WEEK</i>	<i>TRUCKS PER DAY</i>	<i>VEHICLE TRIPS, PEAK HR USING STREETS</i>
TRUCK LOADS FROM/TO OFF-SITE						
Earthwork ²	30	6		36	7	
Other Non-Materials	25	5		25	5	
Subtotal off-site	55	11	2 - 4	61	12	2 - 4
TRUCK LOADS ON-SITE, ³						
Concrete (from Lone Star)						
Building	65	13		65	13	2 - 4
Road/Bridge	58	12		--	--	
Subtotal On-Site	123	25			--	
Total Trucks	178	36	2 - 4	126	25	4 - 8
CONSTRUCTION WORKERS' VEHICLES						
	<i>VEHICLES PER WEEK</i>	<i>VEHICLES PER DAY</i>	<i>VEHICLE TRIPS PEAK HOUR USING STREETS</i>	<i>VEHICLES PER WEEK</i>	<i>VEHICLES PER DAY</i>	<i>VEHICLE TRIPS PEAK HOUR USING STREETS</i>
	1,200	240	144 ⁴	1200	240	144 ⁴

1. Leducor Industries Inc.-Construction Traffic Estimate

2. Estimated from excavation and embankment estimates prepared by KPFF, with 75% of embankment coming from on-site excavation.

3. The Lone Star Concrete plant has a "back gate" that provides direct on-site access without using public streets during Phase 1.

4. An estimated 60% of the construction workers will be scheduled to start and end work shifts in the peak hour.

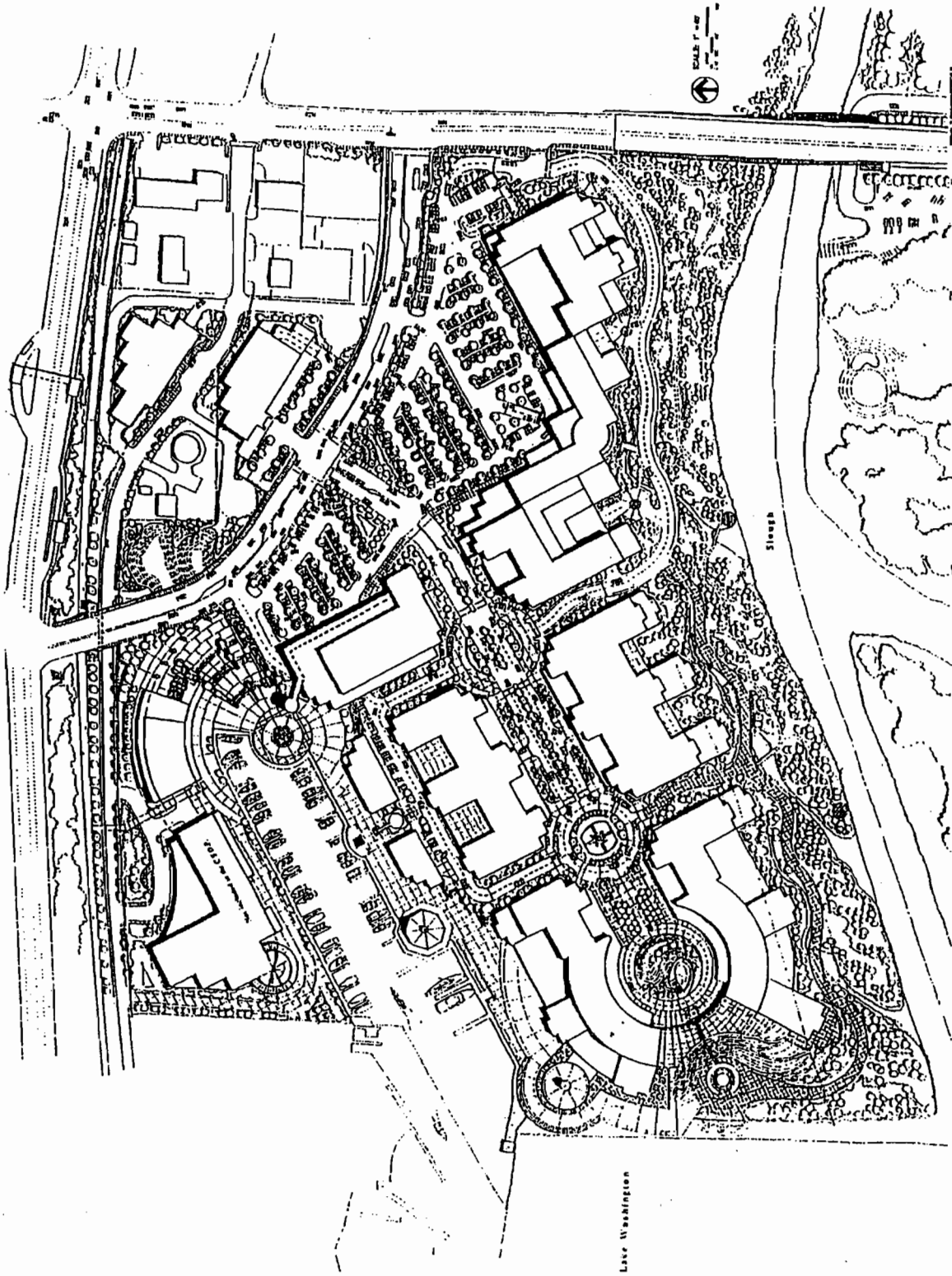
TABLE 10	
LAKEPOINTE DEVELOPMENT ROADWAY IMPROVEMENT PROJECTS	

	PROPOSED ACTION	NSCP ALTERNATIVE (See Table 11, P. 74)
1. Lakepointe Way N.E. (SR 522 to 68th Avenue N.E.)	X	X
<ul style="list-style-type: none"> Dedicate right of way and construct new five-lane arterial connecting with 68th Ave. N.E. approximately 400 ft. south of N.E. 175th St. and with SR 522 at the location of the existing south leg to 65th Ave. N.E.; work with King County and Metro to define potential HOV treatments along the new roadway. Provide sidewalks and bicycle facilities meeting county requirements for handicap accessibility. Provide grade-separate crossing of Burke Gilman Trail at 65th Ave. N.E. 	X	X
2. SR 522 at Lakepointe Way N.E.	X	X
<ul style="list-style-type: none"> Reconstruct intersection to provide dual, north-to-west, left-turn lanes and single, north-to-east, right-turn lane. Provide separate right turn lane south of the transit only lane. Provide crosswalks on south and east approaches to the intersection. Signalize intersection including pedestrian actuated phasing. 	X X X X	X X X X
3. Lakepointe Way N.E. at 68th Avenue N.E.	X (Dual Left + one thru lane)	X
<ul style="list-style-type: none"> Widen 68th Ave. N.E. to provide left, left-thru, and thru lanes on the northbound approach; the new left-turn lane will extend approximately 100 ft. south of the intersection. (Improvement may require an administrative variance to King County Road Standards; specific design and need for a variance will be determined as part of the Design Memo). Provide single left and double right-turn lane on eastbound approach. Provide crosswalk. Signalize intersection including pedestrian actuated phasing. 	X X X	X X X
4. N.E 175th Street at Lakepointe Way N.E. (65th Ave. N.E.)	X Grade Separation. Reconstruct near site. Provide a Service Road /Parking access under Lakepointe Way N.E.	X Figure 1, P.4, NSCP Lakepointe TA report

TABLE 10

LAKEPOINTE DEVELOPMENT ROADWAY IMPROVEMENT PROJECTS

	PROPOSED ACTION	NSCP ALTERNATIVE (See Table 11, P. 74)
5. N.E. Lakepointe Blvd. at Lakepointe Way N.E. <ul style="list-style-type: none"> • Provide dual, left-turn lanes for traffic exiting the Lakepointe site. • Provide new access connections to replace east leg of N.E. 175th St./65th Ave. N.E. Intersection • Provide crosswalks • Signalize intersection including pedestrian actuated phasing 	X (Plus entering) East leg not removed. X X	X X X X
6. 80th Avenue N.E. at SR 522 <ul style="list-style-type: none"> • Restripe southbound approach to provide separate left-and right turn lanes (with or without Lakepointe). 	X	X
7. 68th Avenue N.E. at N.E. 170th Street (Simonds Road) <ul style="list-style-type: none"> • Monitor signal operations and modify signal phasing to provide overlap signal phase for the south-to-east left-turn and west-to-north right-turn movements (with or without Lakepointe). 	X	X
8. 61st Avenue N.E. at SR 522 <ul style="list-style-type: none"> • Provide exclusive southbound left turn lane and implement a southbound right turn phase overlap. 	X	Not Provided



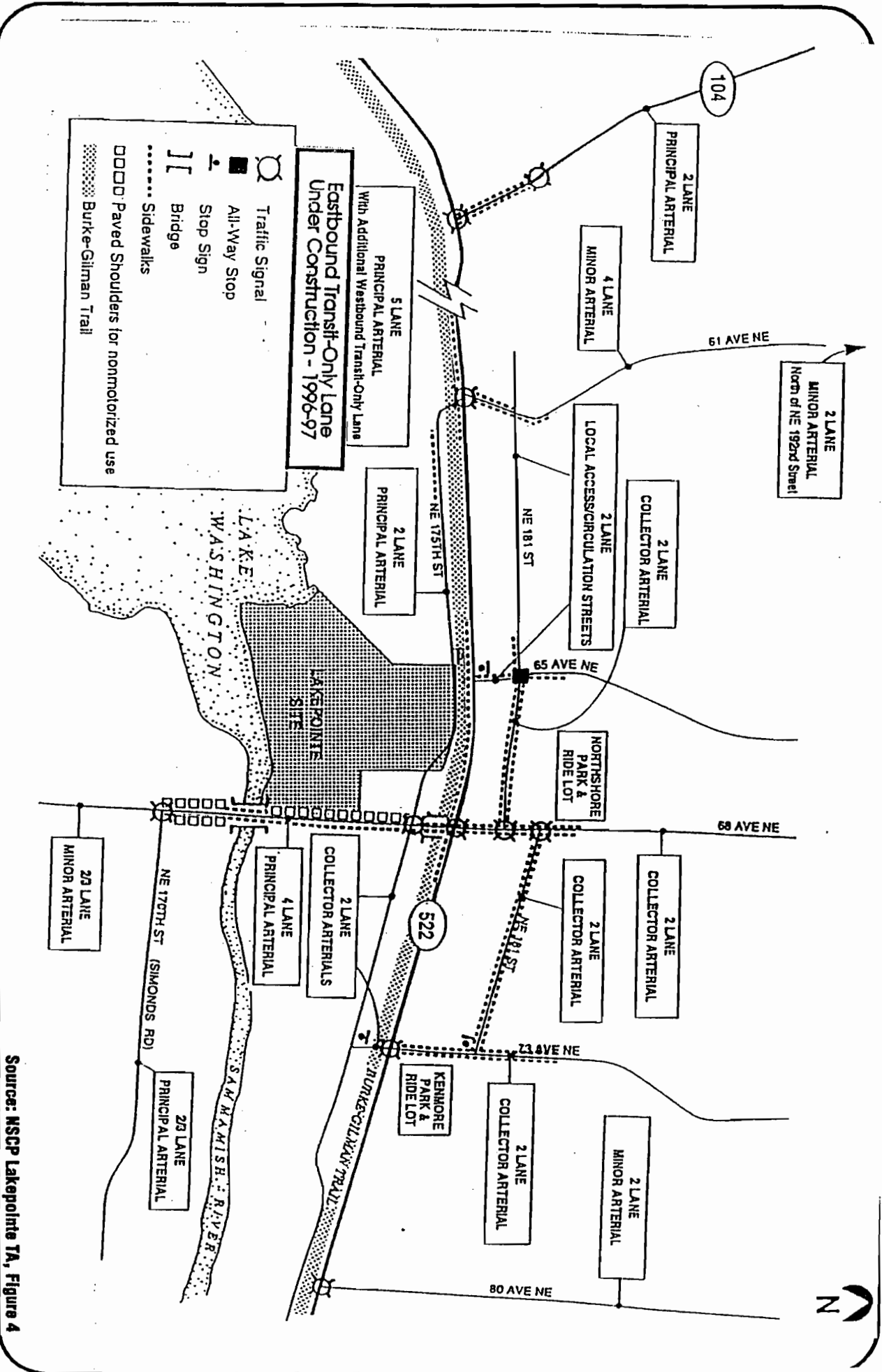
FIGURE

1

2/18/97



Master Plan Working Model - Proposed Action
Lakepointe Development Transportation Impact Analysis

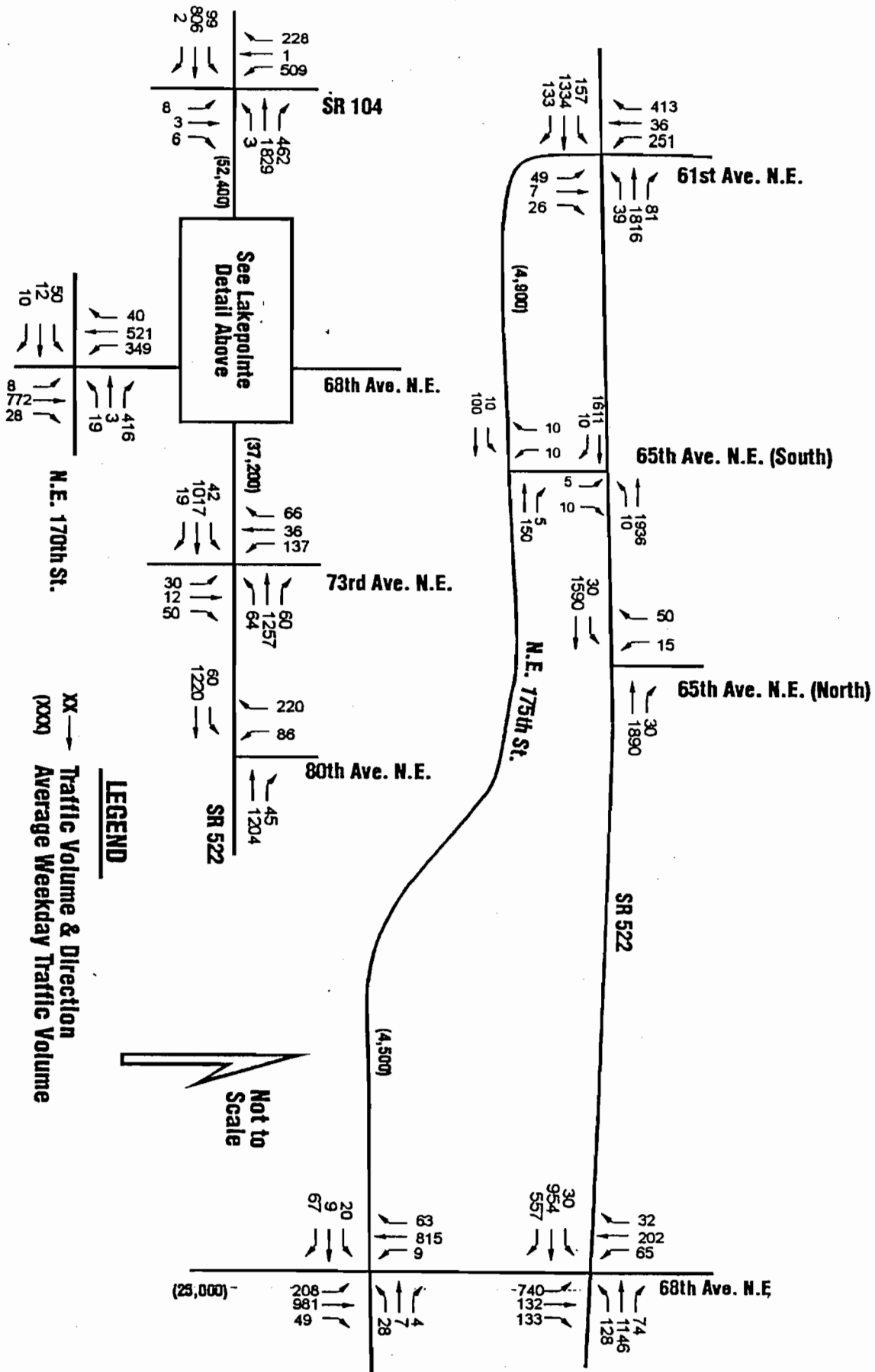


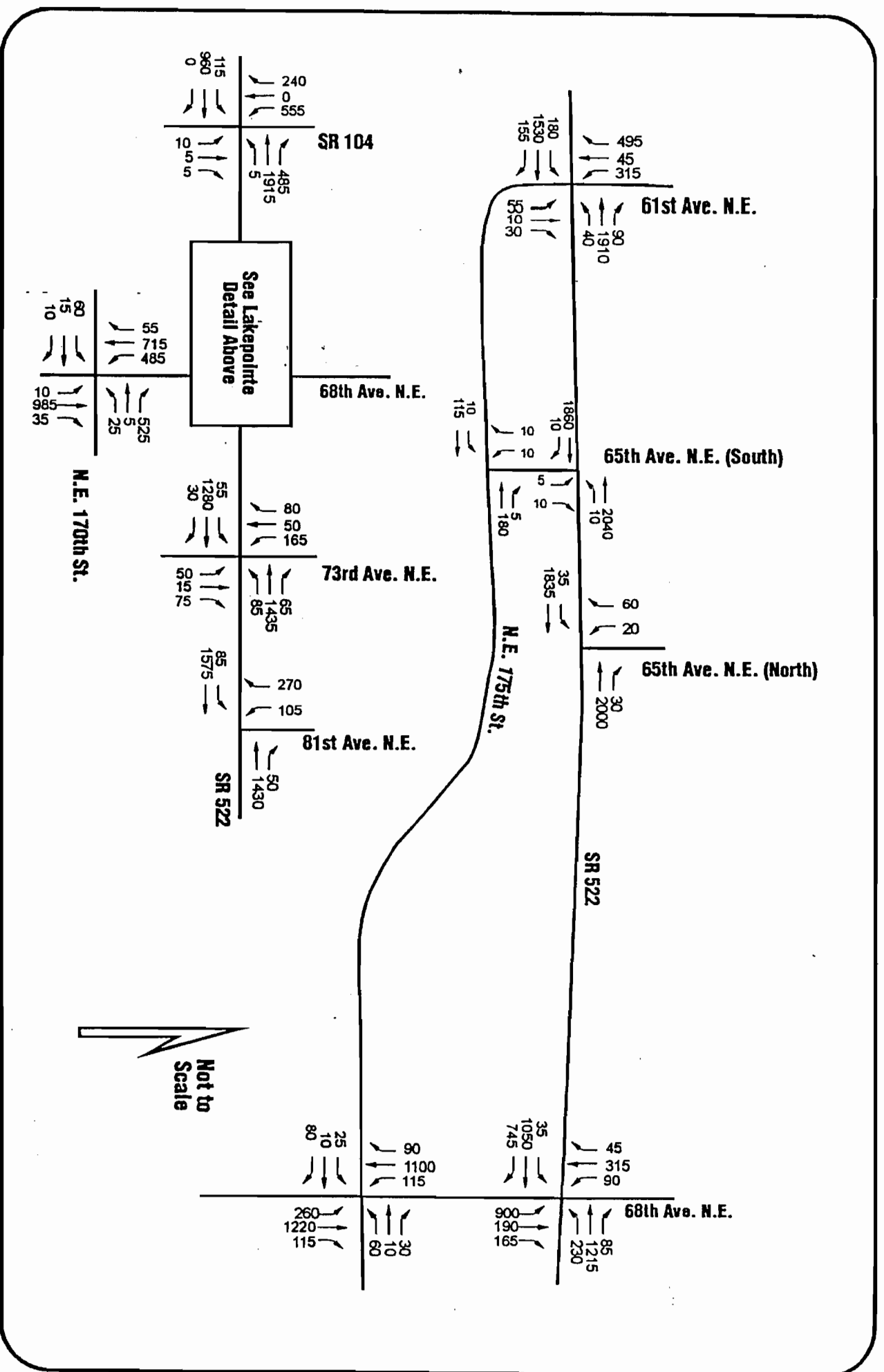
Source: NSCP Lakepointe TA, Figure 4

Existing Roadway System

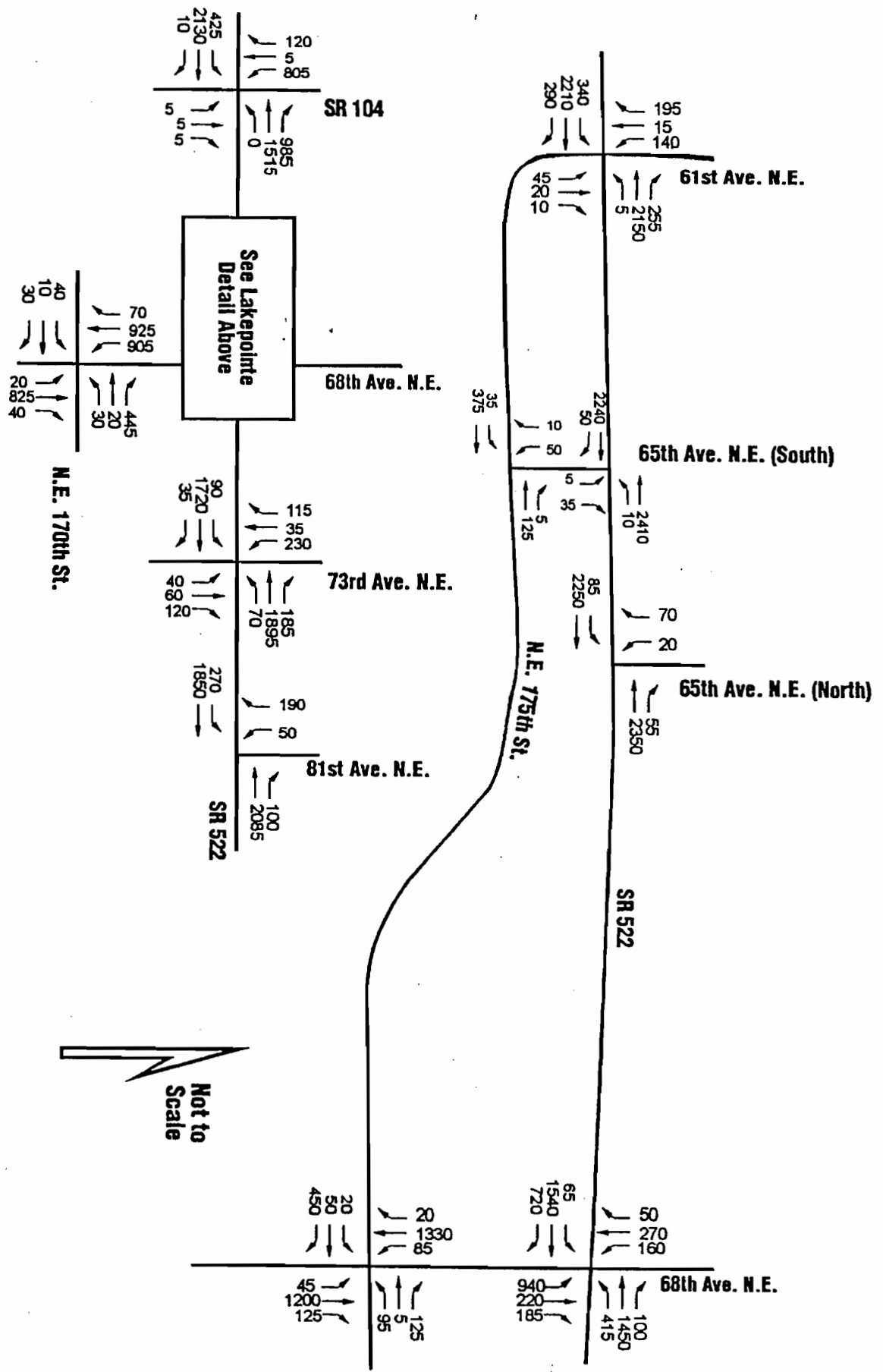
Lakepointe Development Transportation Impact Analysis

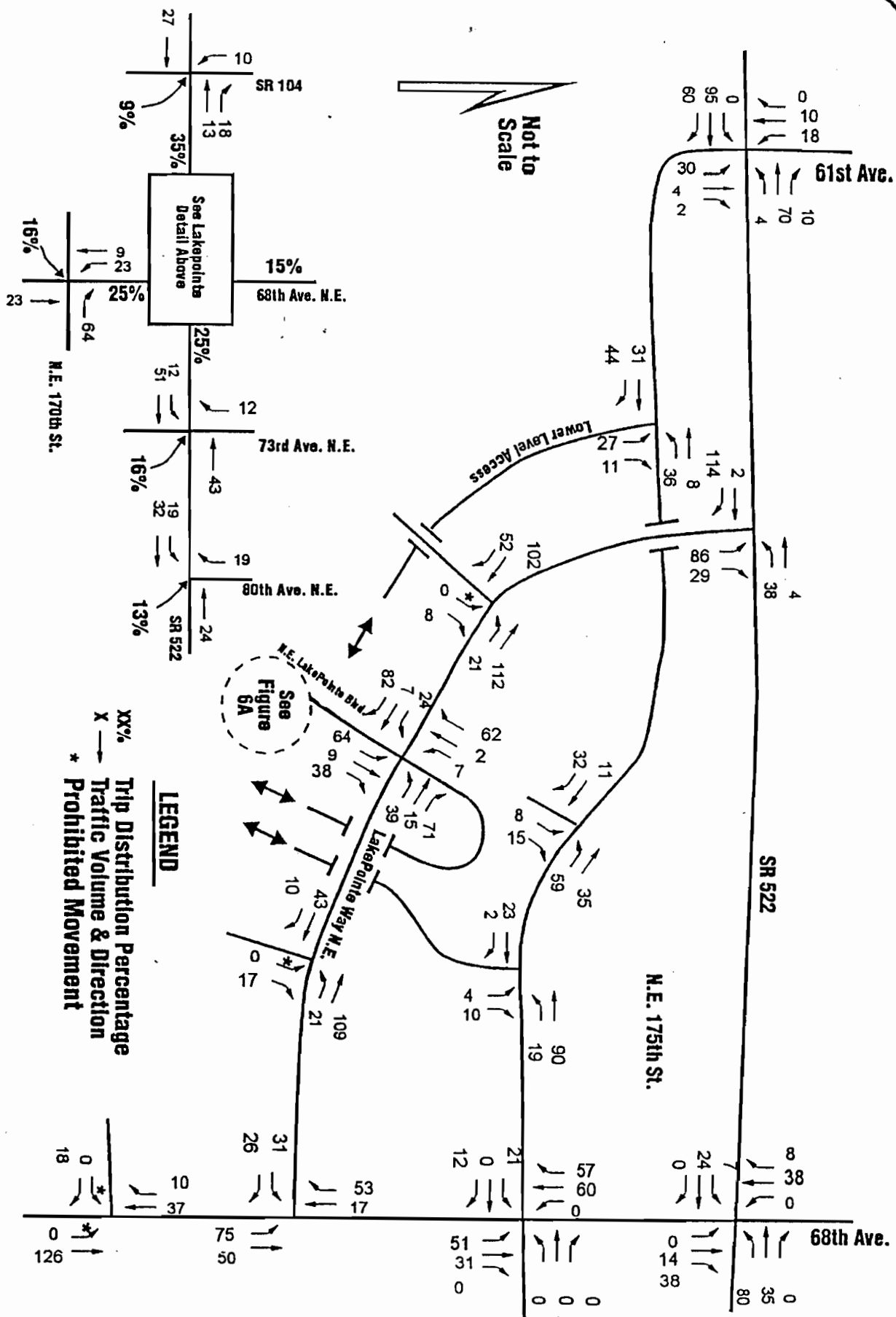






FIGURE





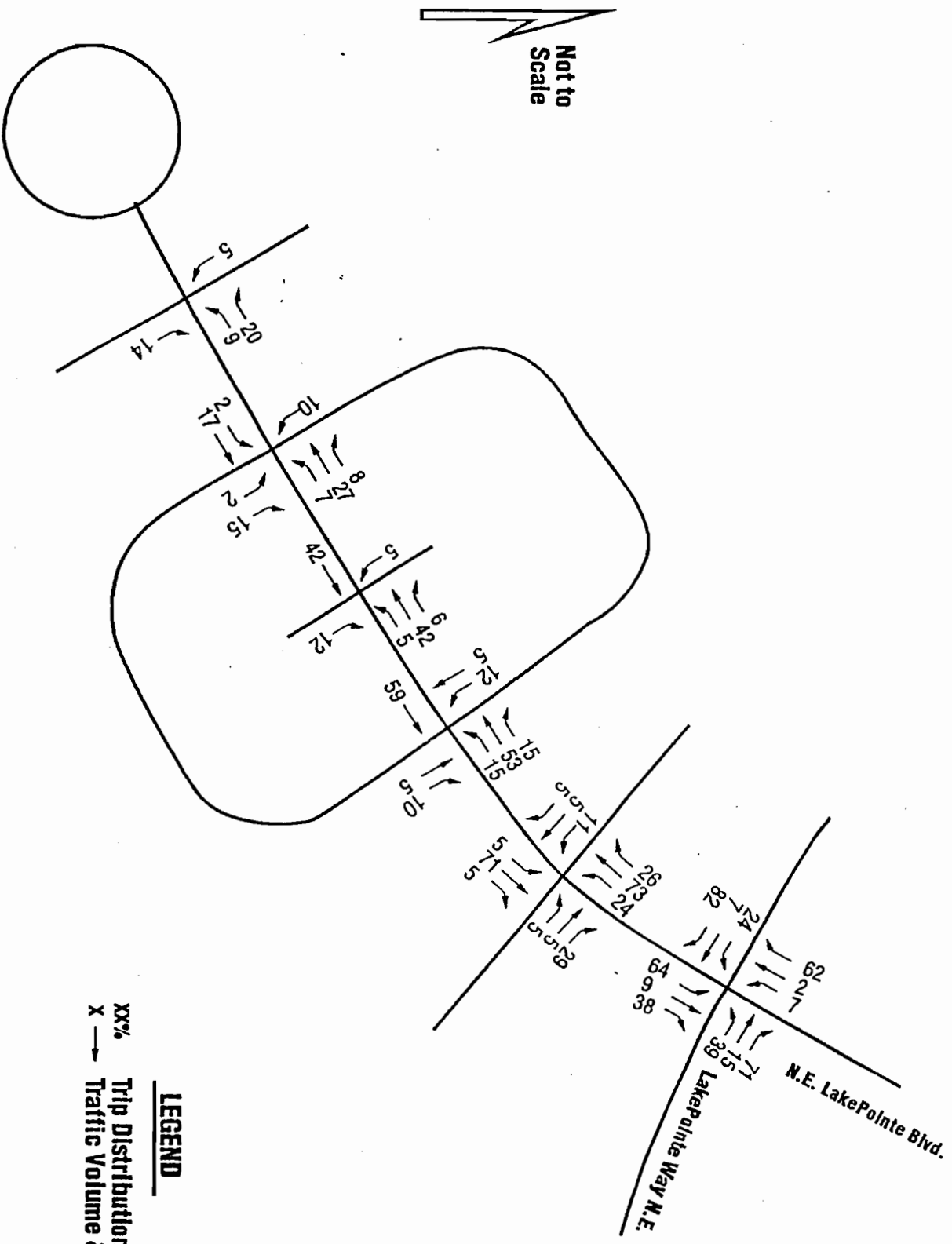
AM Peak Hour Project Traffic - Proposed Action

Lakepointe Development Transportation Impact Analysis

FIGURE

6

2/18/97



AIM Peak Hour Project Traffic - Proposed Action

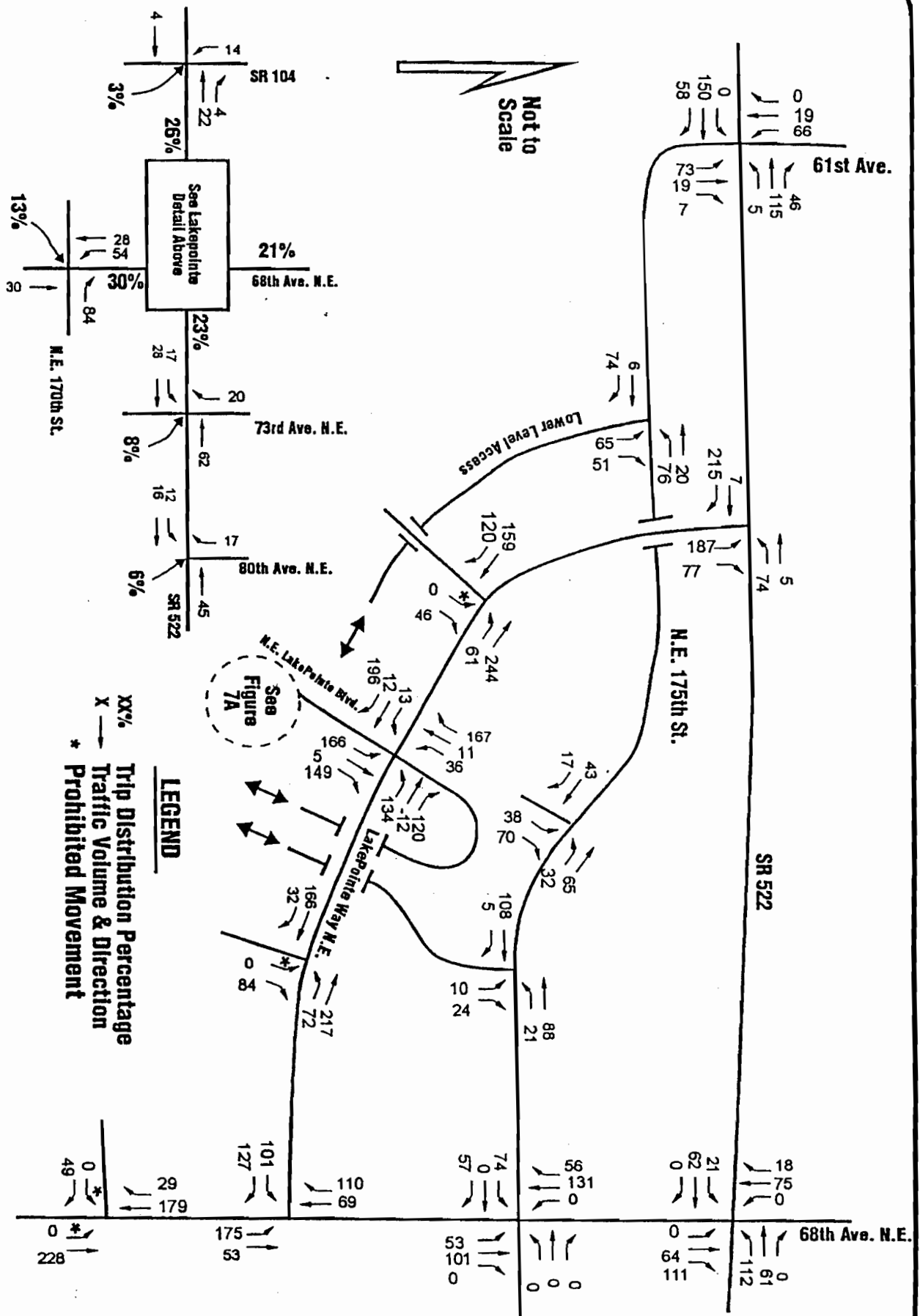
Lakepointe Development Transportation Impact Analysis



FIGURE

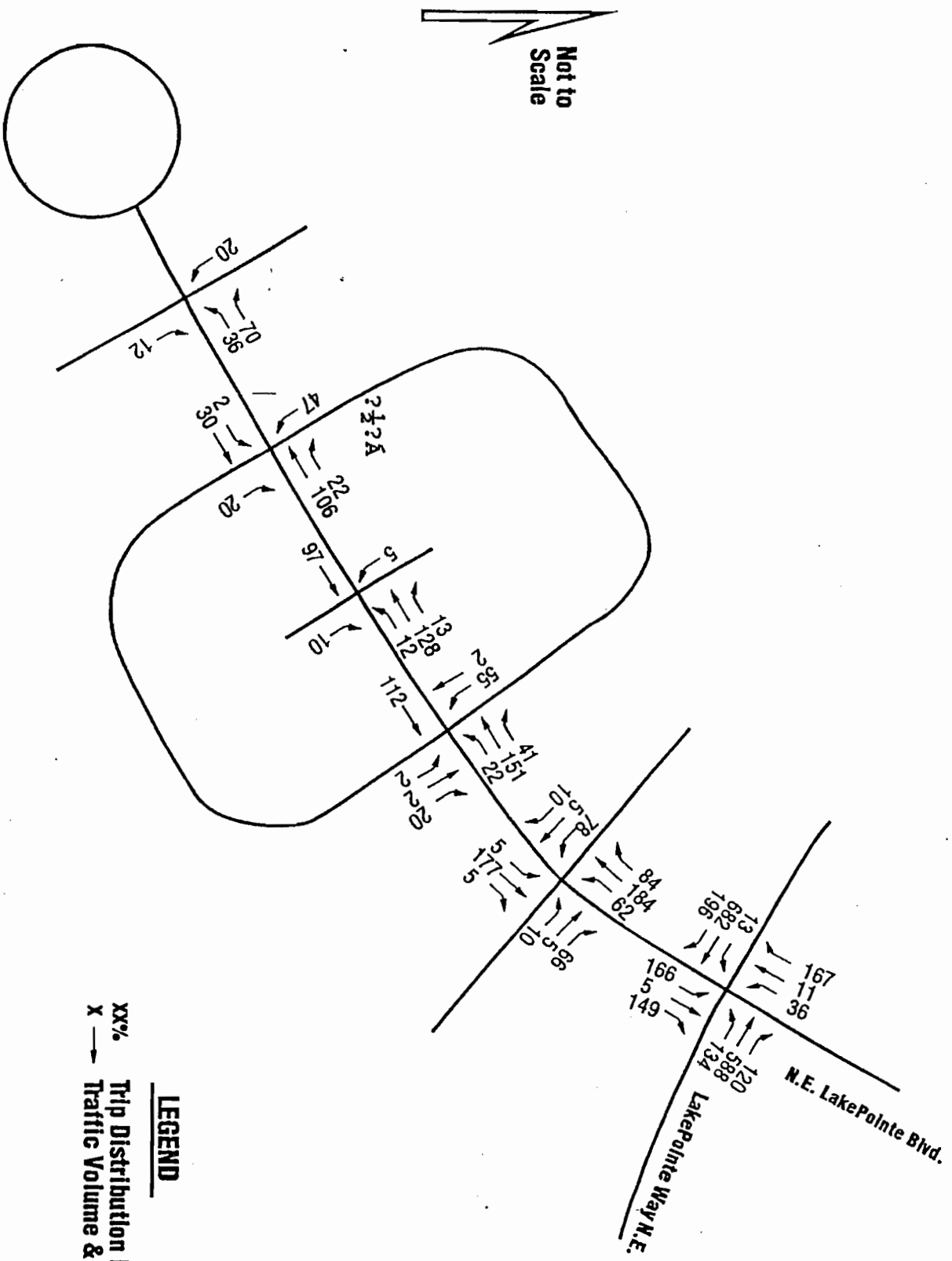
6A

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PM Peak Hour Project Traffic - Proposed Action

Lakepointe Development Transportation Impact Analysis



PM Peak Hour Project Traffic - Proposed Action

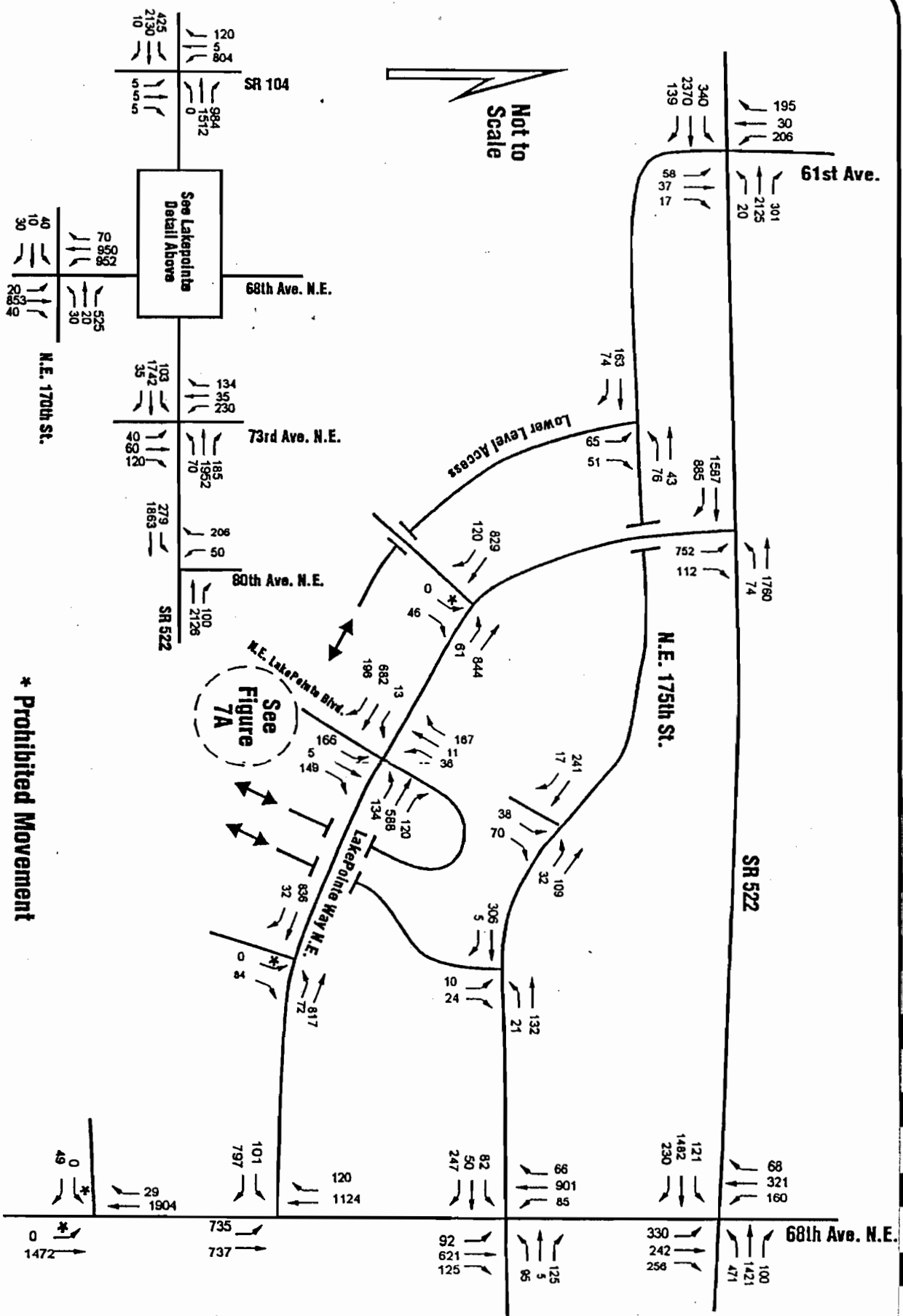
Lakepointe Development Transportation Impact Analysis



FIGURE

7A

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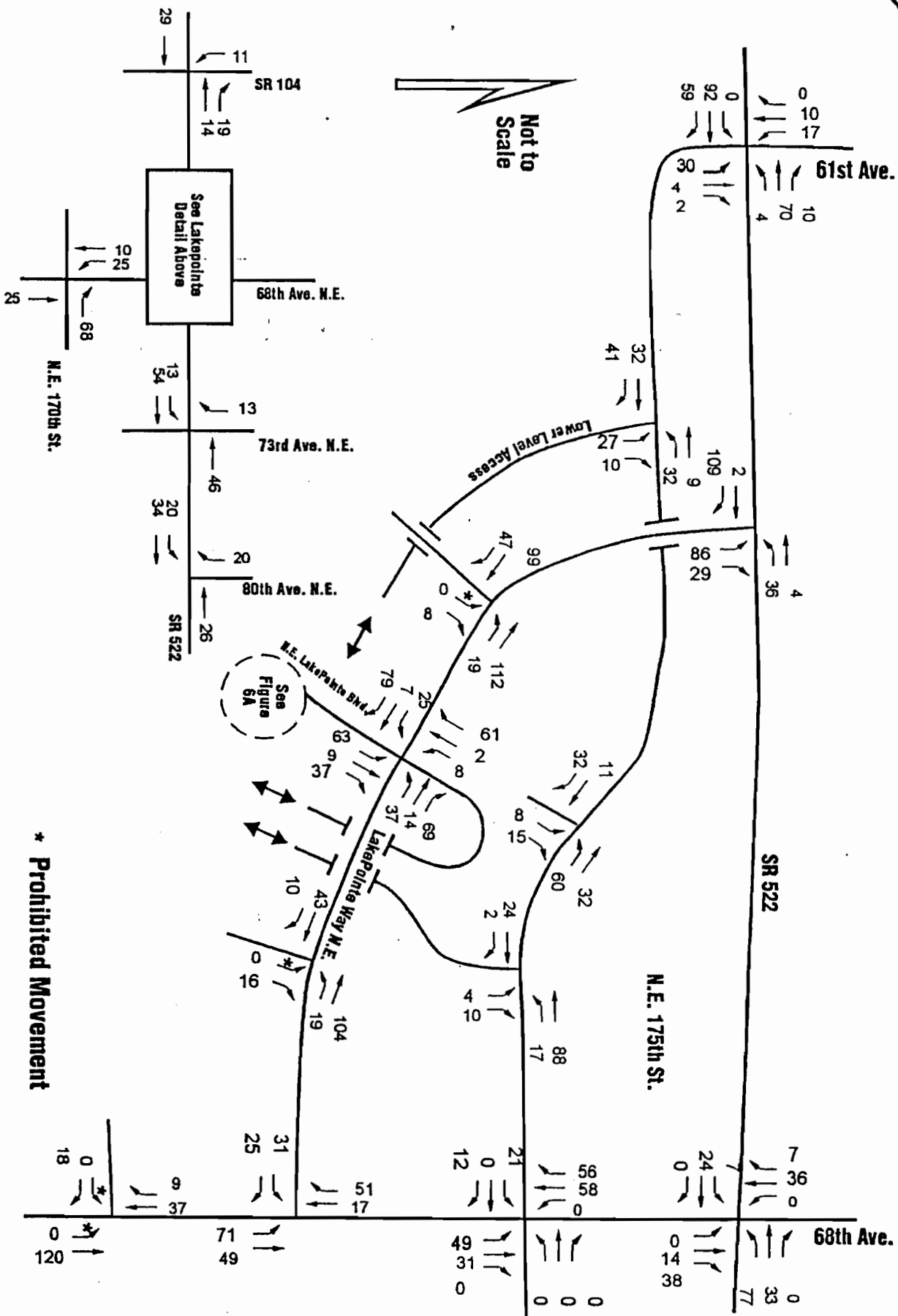
PM Peak Hour Background Plus Project Traffic - Proposed Action Lakepointe Development Transportation Impact Analysis



FIGURE

9

2/20/97



AM Peak Hour Project Traffic - Alternative Development Scenario

Lakepointe Development Transportation Impact Analysis



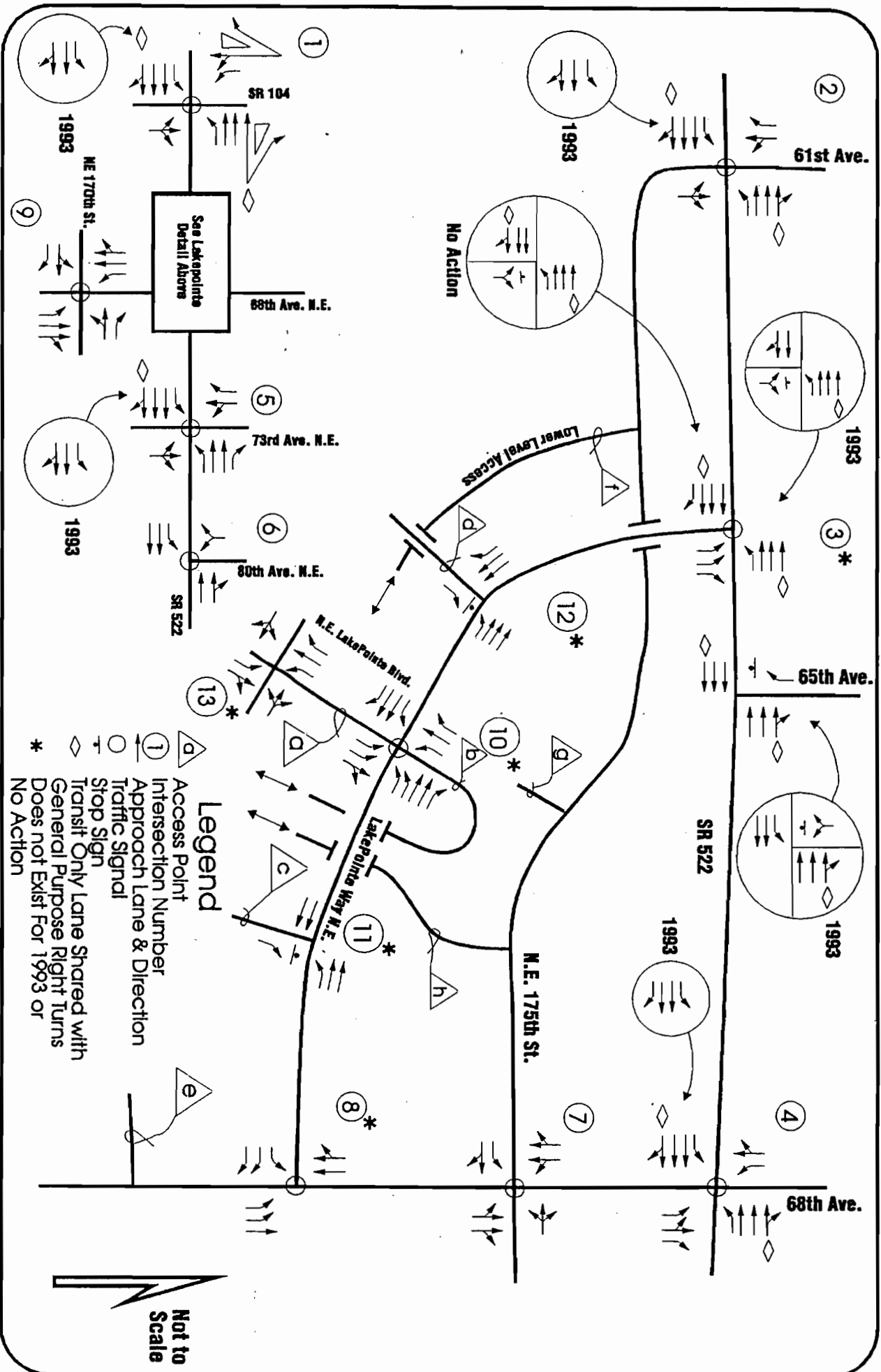
FIGURE

10

2/20/97

The map illustrates the traffic volume data for Lakepointe Way N.E. and its intersections. Key features include:

- Intersections:** 61st Ave., 68th Ave. N.E., 73rd Ave. N.E., 80th Ave. N.E., and N.E. 175th St.
- Highways:** SR 104, SR 522, and N.E. Lakepointe Blvd.
- Prohibited Movements:** Indicated by asterisks (*) at several intersections, including 61st Ave., 80th Ave. N.E., and N.E. 175th St.
- Traffic Volume Data:** Numbers along the road segments represent traffic volume. For example, at the intersection with 61st Ave., the volume is 0 for the northbound approach and 138 for the southbound approach. At the intersection with 68th Ave. N.E., the volume is 116 for the northbound approach and 73 for the southbound approach.
- Other Labels:** "See Lakepointe Detail Above" (referring to Figure 7A), "Lower Level Access", and "Not to Scale".



Lane Configurations - Proposed Action - (1993 & No Action Noted)

Lakepointe Development Transportation Impact Analysis

